BATTLE CREEK SANITARIUM

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# M the Journal

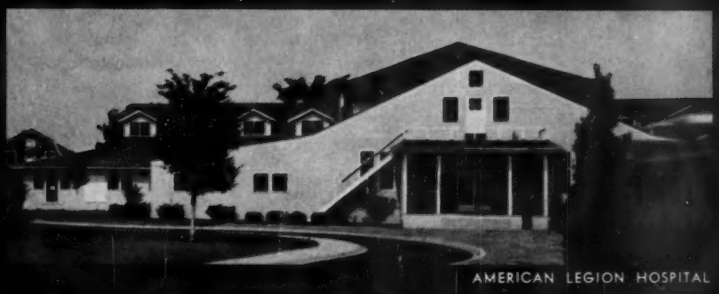
## STATE MEDICAL SOCIETY

DECEMBER, 1945 VOLUME XLIV NUMBER 12

MODERN VA HOSPITAL

*Three Modern and Four Historic Hospitals in* **BATTLE CREEK,** *"The Cereal City"*

**This number dedicated to Calhoun County Medical Society**



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*References:* (1) Malone, F. J., Jr.: *Mil. Med.* **125**:836, 1960. (2) Martin, W. J.; Nichols, D. R., & Cook, E. N.: *Proc. Staff Meet. Mayo Clin.* **34**:187, 1959. (3) Ullman, A.: *Delaware M. J.* **32**:97, 1960. (4) Petersdorf, R. G.; Hook, E. W.; Curtin, J. A., & Grossberg, S. E.: *Bull. Johns Hopkins Hosp.* **108**:48, 1961. (5) Jolliff, C. R.; Engelhard, W. E.; Ohlsen, J. R.; Heidrick, P. J., & Cain, J. A.: *Antibiotics & Chemother.* **10**: 694, 1960. (6) Lind, H. E.: *Am. J. Proctol.* **11**:392, 1960.

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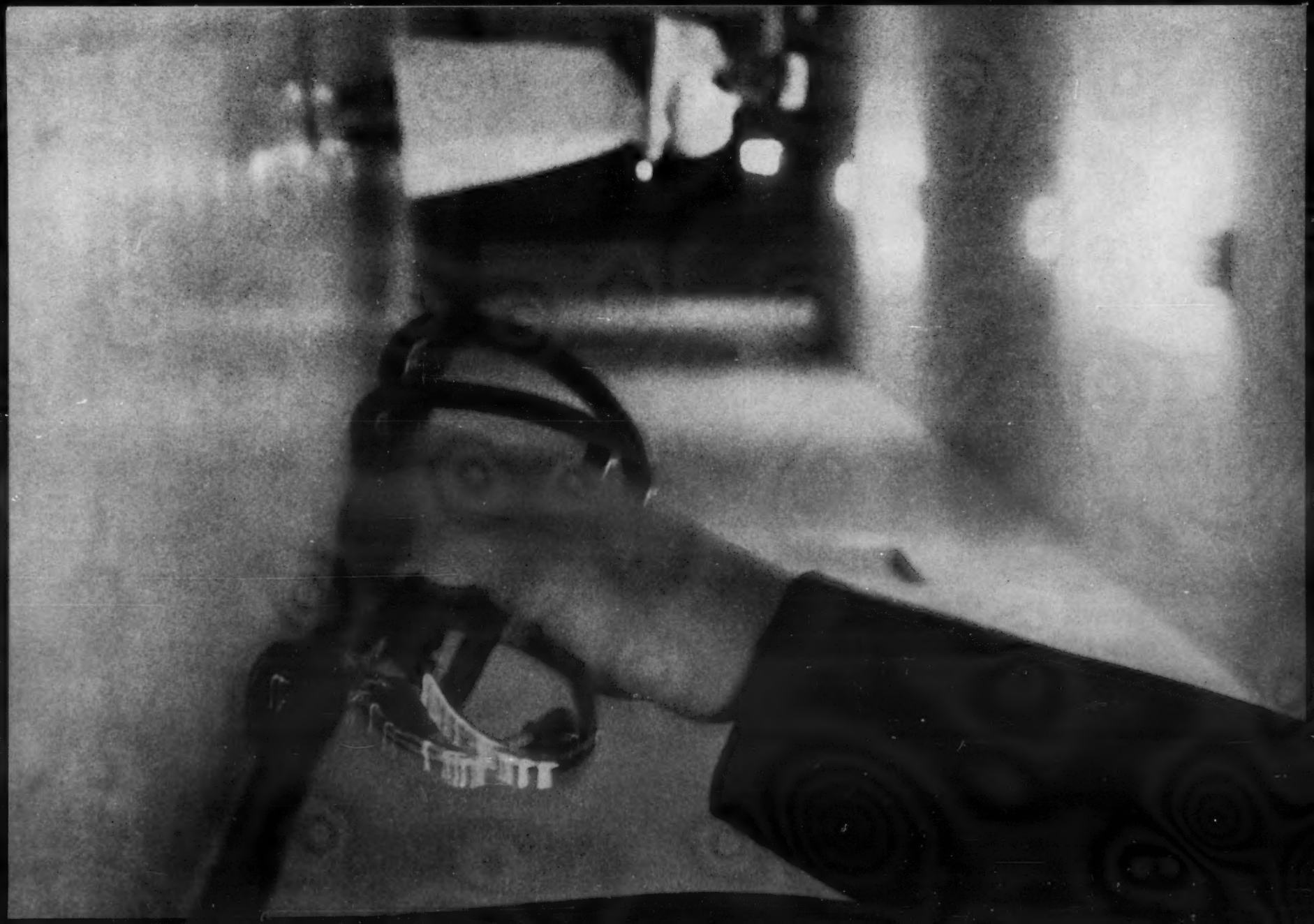

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the Journal MICHIGAN
STATE MEDICAL SOCIETY

Volume 60 Number 12
December, 1961



All communications relative to exchanges, books for review, manuscripts, should be addressed to Wilfrid Haughey, M.D., 610 Post Bldg., Battle Creek, Michigan.

All communications regarding advertising and subscriptions should be addressed to Wm. J. Burns, 120 W. Saginaw Street, East Lansing, Michigan. Telephone 337-1351.

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## THE COVER

The December MSMS Journal salutes the Calhoun County Medical Society. The cover shows the four ristoric hospitals and the three modern institutions which serve Battle Creek. See also page 1558 for more information.

# IN THIS ISSUE


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| D. ROEMER SMITH, M.D. | 13th | Iron Mountain | 1963 |
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| W. A. Hyland, M.D., Grand Rapids, *Chairman* | 1961 |
| O. J. Johnson, M.D., Bay City | 1961 |
| C. I. Owen, M.D., Detroit | 1961 |
| Wm. Bromme, M.D., Detroit | 1962 |
| R. L. Novy, M.D., Detroit | 1962 |
| G. W. Slagle, M.D., Battle Creek | 1962 |

### Alternates

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| G. B. Saltonstall, M.D., Charlevoix | 1961 |
| J. M. Wellman, M.D., Lansing | 1961 |
| B. M. Harris, M.D., Ypsilanti | 1961 |
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*Gamble, C.J.: Am. Pract. & Digest. Treat. *11*:852 (Oct.) 1960. See also Berberian, D.A., and Slighter, R.G.: J.A.M.A. *168*:2257 (Dec. 27) 1958; Kaufman, S.A.: Obst. and Gynec. *15*:401 (March) 1960; Warner, M.P.: J.Am.M. Women's A. *14*:412 (May) 1959.

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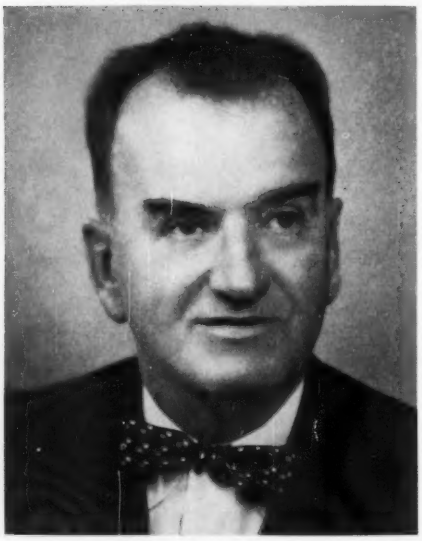
# President's Page

## THAT ALL-IMPORTANT FOURTH AREA



*President*
*Michigan State Medical Society*

As doctors of medicine, we often hear speakers discuss three major areas of Medicine—Research, Teaching and Practice.

We heartily agree that these three areas of activity are important to the general public and to each of us. The practitioner could not perform without the research and teaching support; teaching would be meaningless unless there were practitioners to carry out the work, and research would be fruitless if the teaching and practice arms did not utilize new knowledge and information.

But, I would like to direct our thoughts for a minute to the fourth area—The Maintenance of a Proper Environment for Medicine.

Whether the individual doctor is in research, teaching or in everyday practice, he has a personal concern about an environment that is conducive to progress. As one long active in medical organizations, I suggest that this is the prime responsibility of the county medical societies, the state medical society, and the American Medical Association; their main service is to protect and improve the necessary professional environment.

The environment that we need cannot be gained and maintained by any one group of doctors. The man in practice cannot do it alone—nor can those in research or teaching. Together, the three can—and must—evaluate from time to time the type of environment they need to provide for the best medical care for the most people; then, working together, see to it that that condition evolves.

We begin to contribute when we attend county society meetings, when we participate in the excellent Michigan State Medical Society meetings, and when we join men from other states at the AMA meetings. We contribute more fully as we assume responsibilities as officers and members of county, state and national committees. Work within our specialty groups and with lay organizations in the health field is necessary, too, to augment the positive programs of these basic organizations.

My concern about the environment we need can be likened to the effects of soils, moisture, temperature, sunshine, et cetera, upon the growth and fertility of a tree. The roots represent research, the trunk and branches represent teaching, and the flowers and fruit represent the practice of medicine and related benefits to mankind. This tree cannot be strong and really productive, unless the environment is right. Through your help the tree of medicine can grow stronger and produce more fruit. We need the special knowledge of each one of you if your society is to work effectively for the right kind of environment for your research, your teaching or your practice.

# County Secretaries—PR Seminar Set February 3

One of the highlights of the annual MSMS County Secretaries Public Relations Seminar, Saturday, February 3, 1962, will be an address by a Texas communications expert.

The Seminar participants will hear Professor William DeMougeot, of North Texas State University. He was the headliner at the 1961 AMA Institute in Chicago and was immediately contacted for the MSMS Seminar.

Once again, the County Secretaries-Public Relations Seminar will be conducted for every county society President, President-Elect, Secretary, Editor, and Executive Secretary; and also for members of the MSMS Council, and for the MSMS Public Relations Committee members and Legal Affairs Committee members. Also invited are representatives of the Woman's Auxiliary to MSMS and the Michigan State Medical Assistants Society.

This year, the Seminar will be held at Kellogg Center on the Michigan State University campus.

Nationally known as a debating authority, educator and researcher, Professor DeMougeot will come from Denton, Texas, for the MSMS program.

In his address at Chicago, Professor DeMougeot challenged Medicine to take a more positive approach by demanding that the supporters of socialized medicine show the alleged drastic need for such a program. He contended, "I want you doctors to win your fight against socialized medicine because I think we can solve the problems that still exist in paying for medical care without going to the extremes that less-wealthy nations felt they had to adopt. We must use all the arguments that have logical validity."

* * *

## County Societies Given Aid With Speakers Bureaus

Representatives of county medical societies joined officials of MSMS for a one-day "Speakers Training Session" held at the new MSMS headquarters building in October.

The workshop started fast with a challenging address by MSMS President Otto K. Engelke, who outlined the positive program of Medicine. Darrell Coover, director of the AMA Speakers Bureau, followed with specific guidance for the county medical society on how to organize and utilize a county speakers bureau. Members of the MSMS staff discussed resource materials available from the state society. Visual aids were stressed by a Michigan State University expert.

Classroom instruction followed with three smaller sessions to cover

such topics as speech planning, speech presentation, radio and television, and other topics.

Following are some of the highlights of the address by Mr. Coover:

"THE DESTINY OF Michigan medicine will not be decided by the MSMS. This decision will be made by the highest court of all—public opinion. The MSMS through you—the doctor of medicine and your local association—can exert an influence capable of directing the decision in favor of medicine and beneficial to the public.

"Just as Harry Truman in 1948, we find ourselves with unfavorable press, condemned by at least a portion of Congress and regarded questionably by the general public. We must now take our story directly and personally to the people as did Harry Truman. If we do this with sincerity and simplicity, the results shall be the same for medicine tomorrow as they were for him in 1948. The 'whistle-stops' must include women's clubs, lodges, service clubs, PTA's, church groups . . . anywhere people gather and will listen to a speaker. We must begin now, for this 'election' takes place every day in the minds of the public as they are now constantly exposed to evidence of all kinds.

"The device to be used for this method of campaigning is the Speaker's Bureau. Your local association can form one very simply:

"First, check your membership for every person who can stand before a group of people and talk sincerely about medicine. They do not have to be orators but they must, above all, be sincere.

"Second, notify all the clubs in your area that you have programs and speakers on medicine available. You may do this by letter, newspaper ads, and by word of mouth. Every doctor or a part of his family is a member of such a group. Have each of them arrange for a program at one of their meetings. These groups are constantly in search for programs and are more than happy to have one on medicine. We are controversial at the present time, and you will have no trouble finding interested listeners.

"The most effective way to train persons who have no experience in public speaking is to use one experienced speaker for the main presentation with a panel of two or three 'neophytes' to answer the questions that follow. This gives them experience and overcomes their stage fright. With a little such seasoning, they are ready to go out on their own, taking other 'neophytes' along for seasoning. Your core of speakers will grow quickly.

"The P-R Chairman of each county should be authorized by the officers to begin this activity at once by selecting the members who can now effectively present the story of medicine. Then line up your second team composed of 'trainees' to supplement the main speakers. Send out letters over your president's signature to the program chairman or president of all available groups. Notify all your members of the availability of your Speaker's Bureau and enlist their aid in obtaining bookings.

"Publicize the work by making sure the newspapers receive a notice of the meeting, who spoke, and the subject. You can get the publicity chairman of the host organization to help with this as it means publicity for them as well.

"Once a few such talks have been given, and given well, you will find people calling and asking for speakers.

"Material for these programs is readily available from the MSMS office. There is literature available to distribute to your audience."

ATTENDANCE AT Speaker's Training Session:

V. V. Bass, M.D., Saginaw; H. G. Benjamin, M.D., Grand Rapids; J. W. Bunting, M.D., Alpena; H. T. Caumartin, M.D., Saginaw; Wm. J. Dinnen, M.D., Port Huron; L. A. Drolett, M.D., Lansing; Otto K. Engelke, M.D., Ann Arbor; K. E. Fellows, M.D., Grand Rapids; L. E. Grate, M.D., Charlevoix; C. M. Hanson, M.D., Kalamazoo; N. D. Henderson, M.D., East Lansing;

E. H. Heneveld, M.D., Muskegon; D. B. Hiscoe, M.D., Lansing; Stanley L. Hoffman, M.D., Howell; Jack Hoogerhyde, M.D., Grand Rapids; Kenneth H. Johnson, M.D., Lansing; J. L. Leach, M.D., Flint; E. L. Long, M.D., Detroit; W. Kaye Locklin, M.D., Kalamazoo; H. E. Malcolm, M.D., East Lansing; Oliver B. McGillicuddy, M.D., Lansing; D. W. McLean, M.D., Detroit;

Louis E. May, M.D., Howell; H. P. Muldoon, M.D., Grand Rapids; P. T. Mulligan, M.D., Mt. Clemens; Clarence I. Owen, M.D., Detroit; J. C. Rawling, M.D., Flint; R. W. Teed, M.D., Ann Arbor; H. A. Towsley, M.D., Ann Arbor; Bernard C. Wildgen, M.D., Muskegon; D. Bruce Wiley, M.D., Utica.

## MICHIGAN MEDICAL MEETINGS AND CLINIC DAYS

| | | |
|---|---|---|
| January 19-20 | Symposium on Blood | Wayne County Medical Society, Detroit |
| January 25-26 | Michigan Society of Gerontology | Occidental Hotel, Muskegon |
| February 3 | MSMS County Secretaries-Public Relations Seminar | Kellogg Center East Lansing |
| February 9-10 | Congress of the Professions | Kellogg Center, East Lansing |
| February 10 | Michigan Heart Day | Statler Hotel, Detroit |
| February 15-16 | Conference on Hospital Patient Safety | Ann Arbor |
| February 28, March 1-2 | Michigan Clinical Institute | Detroit |
| March 5-6-7 | American College of Surgeons Sectional Meeting | Sheraton-Cadillac Hotel, Detroit |

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# HIGHLIGHTS of the Council

## Meetings of September 24 and 28, 1961

Ninety-seven items were presented to The Council at its two meetings held co-incident with the MSMS Annual Session in Grand Rapids. Chief in importance were:

- Financial report to August 31 was presented by Finance Committee Chairman Oliver B. McGillicuddy, M.D., of Lansing. Included was the cost of new MSMS exhibit at Michigan State Fair—which won first prize in its class. A vote of thanks was extended to all physicians and other volunteers who manned the exhibit during the ten hot, humid days of the Fair.
- MSMS statement of policy re use of hospitals by allied health professional personnel, based on AMA Resolution No. 50 (of June 1961, New York session) was adopted. This statement is printed on page 1498.
- Plans for the Annual Session of The Council to be held in East Lansing, February 1-2, 1962, as well as proposed program for County Secretaries-Public Relations Seminar, scheduled for East Lansing February 3, were reviewed and approved. The program for the workshop of Michigan's County Society Executive Secretaries, to be held at MSMS Headquarters November 9, was approved.
- The publishing of a digest of the Annual Report of The Council, to be known as the "Annual Report of the Michigan State Medical Society," was authorized.
- President K. H. Johnson, M.D., of Lansing presented a progress report of the new MSMS building and its maintenance; on the appointment of a new AMA Field Secretary to cover the State of Michigan—William R. Ramsey, formerly of King County Medical Society, Seattle, Washington; preliminary plans for installing first aid medical facilities in the Lansing Civic Center for Delegates to the Michigan Constitutional Convention, which plans were approved by The Council.
- Carleton Fox, D.D.S., of Detroit presented to the MSMS President a gavel made from the timber of the original Beaumont House on Mackinac Island "as a reminder of the great contribution made by Doctor Beaumont in 1820 in the most primitive surroundings." Wm. M. LeFevre, M.D., of Muskegon supplied a hand-made box container for the gavel. Both Doctors Fox and LeFevre were thanked for this contribution to The Society, the gavel to be known as "The Presidents Gavel."
- Letter from the National Foundation, re patient-aid policies not permitting payment of professional fees, was received as information and was ordered published in THE JOURNAL and in The Secretary's Letter.
- Testimony before House Ways and Means Committee in Washington re King-Anderson Bill. Otto K. Engelke, M.D., MSMS President-Elect, complimented the MSMS staff, officers and AMA staff in Washington for help in making his appearance in Washington an effective one. He especially praised MSMS efforts in obtaining extensive and favorable local publicity for the MSMS testimony.
- Resignation of Council Vice-Chairman T. P. Wickliffe, M.D. Doctor Wickliffe stated he wished to announce his resignation as Councilor of the Thirteenth District as he planned to move to California November 1. Doctor Wickliffe's action was received with sincere regret and with thanks for his notable contributions to the Michigan State Medical Society and to the medical profession of Michigan.
- G. Thomas McKean, M.D., President, and Mr. Sumner Whittier, Executive Vice-President, reported on matters pertaining to Michigan Medical Service and to Medicare.
- The Supplemental Annual Report of The Council was reviewed, amended, and approved for presentation to The House of Delegates.
- At the second meeting of The Council (September 28) the newly elected Officers and Councilors were introduced: C. I. Owen, M.D., of Detroit, President-Elect; W. C. Carpenter, M.D., Detroit, Councilor of First District; E. E. Martmer, M.D., Detroit, Councilor of First District; H. C. Hansen, M.D., Battle Creek, Councilor of Third District; Wm. A. Scott, M.D., Kalamazoo, Councilor of Fourth District; C. Allen Payne, M.D., Grand Rapids, Councilor of Fifth District; H. H. Hiscock, M.D., Flint, Councilor of Sixth District; D. R. Smith, M.D., Iron Mountain, Councilor of Thirteenth District.
- Reorganization of The Council:
  1. O. B. McGillicuddy, M.D., of Lansing was chosen as Chairman of The Council.
  2. O. J. Johnson, M.D., of Bay City was selected as Vice-Chairman of The Council.
  3. Robert J. Mason, M.D., of Birmingham was elected as Chairman of the County Societies Committee.
  4. W. W. Babcock, M.D., Detroit, was made Chairman of the Finance Committee.

5. Wm. A. Scott, M.D., Kalamazoo, was selected as Chairman of the Publication Committee.

- The Public Relations Counsel's monthly report included: (a) progress on pilot-survey of medical aid to the aged by the Ingham County Medical Society for information on the workings of MMA program in Michigan. A number of detailed questions will be asked of the Ingham County Bureau of Social Aid and an effort will be made to receive regular monthly statistics regarding the program, all information available to MSMS. If successful, the program is to be recommended to a number of other representative counties in Michigan with a view to improving implementation of the program by M.D.'s generally. (b) An MSMS Membership Services Exhibit has been developed and was shown for the first time at the Annual Session in Grand Rapids. (c) An excellent response to the poster-pamphlet card offer, an easel display for the doctor's office, has been received. (d) A training session for speakers is scheduled at MSMS headquarters for October 19.
- The Council placed on its minutes a vote of thanks to Parke, Davis and Company for exhibiting "The History of Medicine" at the 1961 Annual Session; the firm was complimented for continuing an excellent public relations program to both doctors of medicine and lay groups throughout the country.
- Executive Director Wm. J. Burns was authorized to attend the Second Michigan Consumers Protective Conference to be held at Cobo Hall, Detroit, November 2 as a member of the panel on "Quackery and Nostrums in the Health Field."
- Legal Counsel's report included:
  (a) opinion on whether a person may leave his body to a medical school or hospital for scientific purposes;
  (b) review of newspaper story concerning death of a prisoner in county jail under circumstances which cast some unfair reflections on the medical profession;
  (c) opinion with respect to various complicated legal questions arising out of relations between a county medical society and welfare authorities;
  (d) opinion on legality of intravenous medication by nurses;
  (e) Legal Counsel was authorized to render an opinion in connection with a possible student survey, in a Michigan University, on the clinical response of students suffering from colds to a new drug being developed by a pharmaceutical house.
- The following committee reports were reviewed: (a) 1962 MCI Committee on Arrangements, meeting of July 19, and of its Program Committee, meeting of August 30, (b) Courses on Medical Economics and Ethics, August 20, 1961, (c) Committee on Insurance, August 22, 1961, (d) Scientific Radio Committee, August 23, (e) Disaster Medical Care Committee, September 13, (f) Healing Arts Study Committee, September 13 (which included recommendation to the House of Delegates that a joint committee, of The House of Delegates and The Council, be appointed to give study to the osteopathic question as it applies to Michigan), (g) Mental Health Committee, September 14, (h) Publication Committee of The Council, September 24, (i) Medical Care Study Committee, July 13, (j) Legal Affairs Committee, July 14, and its sub-committee on single medical practice act, April 27, (k) Liaison Committee with State Bar of Michigan, June 14, which included "Principles Governing Hospitals, Lawyers and Doctors," with respect to hospital records and contacts between lawyers and patients, which were accepted by The Council as modified by the Committee.
- Matters of mutual interest were discussed with Michigan State Health Commissioner A. E. Heustis, M.D., including (a) departmental activities, (b) flu vaccine, (c) poliomyelitis, (d) radioactive fall-out, (e) legislation, (f) budget requests.
- President-Elect C. I. Owen, M.D., was appointed a member of the Centennial Committee for the 1965 MSMS Annual Session in Detroit.
- Representatives appointed:
  1. C. P. Anderson, M.D., Detroit, to attend Twelfth County Medical Society Conference on Disaster Medical Care, in Chicago, November 4-5, 1961.
  2. Public Relations Counsel H. W. Brenneman to attend Public Relations Society of American Annual Meeting in Houston, November 13-16, 1961.
  3. George W. Slagle, M.D., Battle Creek, to attend AMA National Congress on Prepaid Health Insurance, Chicago, October 14-15, 1961.
  4. G. E. Millard, M.D., Detroit, and J. W. Rice, M.D., Jackson, to attend American Association of Medical Assistants, Reno, October 13-15, 1961.
  5. President Otto K. Engelke, M.D., Ann Arbor, to attend American Medical Association Clinical Meeting, Denver, November 27-30, 1961.
- Reports: The report of R. W. Teed, M.D., Ann Arbor, on American Medical Association Institute held in Chicago, August 31-September 1, was accepted, with thanks; The report of G. E. Millard, M.D., Detroit, on Michigan Association of the Professions Conference with School Counselors, Alma College, July 8-9, was accepted with thanks;

the report of A. Jackson Day, M.D., Detroit, on AMA Workshop re Relative Value Study, held in Kansas City, September 16, was accepted with thanks.

- A Fifty-Year Award was presented posthumously to Harry A. Barbour, M.D., who had practiced in Flint for fifty years prior to his death in 1954.
- A special vote of thanks was extended to B. M. Harris, M.D., of Ypsilanti, Wm. M. LeFevre, M.D., Muskegon, and Oliver B. McGillicuddy, M.D., of Lansing for valuable services as Chairman of the Council's Standing Committees for many years.
- Official recognition and thanks to retiring Councilors and Officers for contributions to the Michigan State Medical Society over the years was authorized by The Council, which also placed on its minutes a special vote of thanks to all who helped make the 1961 MSMS Annual Session an outstanding success, particularly H. G. Benjamin, M.D., Grand Rapids, General Chairman; David Kahn, M.D., Lansing, Chairman of the Program Committee, and J. R. Lentini, M.D., of Grand Rapids, Chairman of the Committee on Scientific Exhibits.
- An informational briefing session for new Councilors was authorized by The Council, to be held November 15, 1961, in East Lansing.

## A Psychiatrist Looks at the MSMS Presidents Plan

In this paper, my views will be summarized under three categories.

1. *It is not enough to add years, we must add good ones.* This implies not only an orthodox approach to the purely physical problems of the oldster, but also suggests research into the psychologic, the sociologic, and the economic status of the oldster.

(a) Preservation of the capacity of the oldster to master his environment needs to be understood so that his feelings of usefulness can continue.

(b) Changes in the patterns of hospitalization of older people must be diligently understood. Great, impersonal hospitals must yield to smaller, community oriented, institutions which aim to keep the oldster out of institutional living, rather than in it. Hospitals which are devoted to the understanding of the psychic problems of these people can supercede those in which expensive, often unnecessary, somatic care is the chief interest.

(c) Particularly in large population centers, the physician must be interested in housing patterns which will tend away from the impersonal characteristics of most big city dwellings.

2. *It is well within our present knowledge to accomplish part of the things listed above.* Experiments in several different localities have indicated patterns which can be followed and elaborated. In addition, changes in housing laws by the Federal Government have made possible the development of much more useful and adequate dwellings for older people.

3. *What we already know and what we can already do represents only the barest beginning.* Most of the information which we now have about geriatrics and even gerontology represents the reasoning of interested and often very capable people about what ought to be the problem. This is emphatically insufficient. In no other branch of medicine is there such absence of empirical proof of theses. Adequate studies even of the question of retirement being beneficial or the opposite do not exist.

It is for this reason in particular that medicine is uniquely qualified to take the lead, wresting it from politicians and do-gooders. If the established course of medical research is followed, it can lead the population out of the morass of conflicting ideologies and shortsighted, impractical panaceas.

(a) A program within the state can be established with the cooperation of the medical schools and the state medical society. This should be a multidisciplinary endeavor under the proper direction of medical authority.

(b) The program should be developed and divided into two distinct phases, which can be worked on concomitantly.

(1) A basic research, primarily and almost solely under the auspices of the medical schools, is essential. So little is known about the genesis or treatment of a tremendous group of degenerative disorders that more talent and money and time could very well be devoted to their investigation. The same is true of a vast group of metabolic disorders.

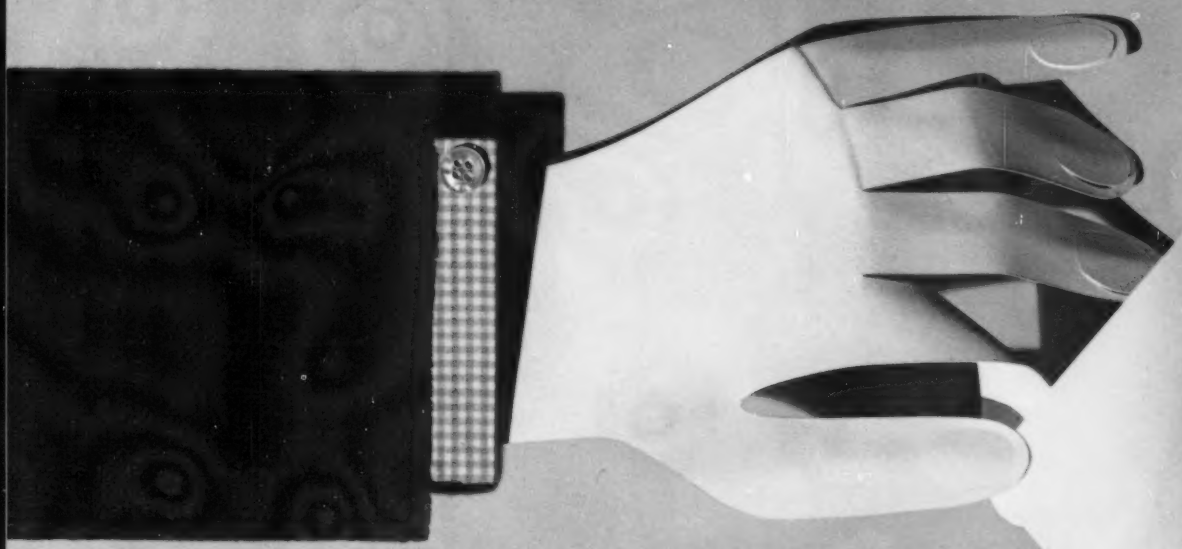
(2) A clinical research program which, it is to be hoped, would enlist the active cooperation of every physician in the state, should be a joint venture of the medical society and the medical schools.

A. H. HIRSCHFELD, M.D.

## MSMS Chairman Cited

Charles P. Anderson, M.D., Detroit, chairman of the MSMS Committee on Disaster Medical Care, was honored recently for his contributions to medical-health and disaster preparedness. Dr. Anderson was presented the Pfizer Award of Merit at the 10th Annual Conference of the U. S. Civil Defense Council in Los Angeles. Dr. Anderson was cited for his "organizational activity in civil defense and disaster, chemical, radiological and biological non-military defense and mass casualty care." He is deputy director of medical service for Detroit Civil Defense.

# feel the edge of this page...



Like this page, a Filmtab coating is about 1/250th of an inch thick. That's the depth of the Filmtab which seals the active ingredients into Abbott vitamin tablets.

Why do we make it paper-thin?

Filmtab coatings replace sugar coatings. This means that our vitamin tablets are quite a bit smaller than most—sometimes by as much as 30%. This makes them easier to swallow. And, because there's no bulk (not even sub-seals are needed) the nutrients are readily available. Yet, patients remain protected from vitamin odors and after-tastes.

The greatest advantage, however, is in stability.

Filmtab coatings don't require water. Consequently, there is virtually no chance of moisture degradation. The potency your patient pays for stays in the tablet. Without sugar, we've even been able to eliminate much of the brittleness. So, tablets are less apt to chip or break.

Small reasons, perhaps, yet no refinement is too subtle if it adds to a product's performance, or your patient's convenience.

*Filmtab coatings protect these Abbott nutritionals:*

| | | |
|---|---|---|
| **DAYALETS®** | **OPTILETS®** | **SURBEX-T™** |
| **DAYALETS-M®** | **OPTILETS-M®** | **SUR-BEX® WITH C** |
| *Maintenance Formulas* | *Therapeutic Formulas* | *B-complex with C Formulas* |

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Filmtab—Film-sealed tablets, Abbott

112069

and you'll know how thin a FILMTAB® coating can be!

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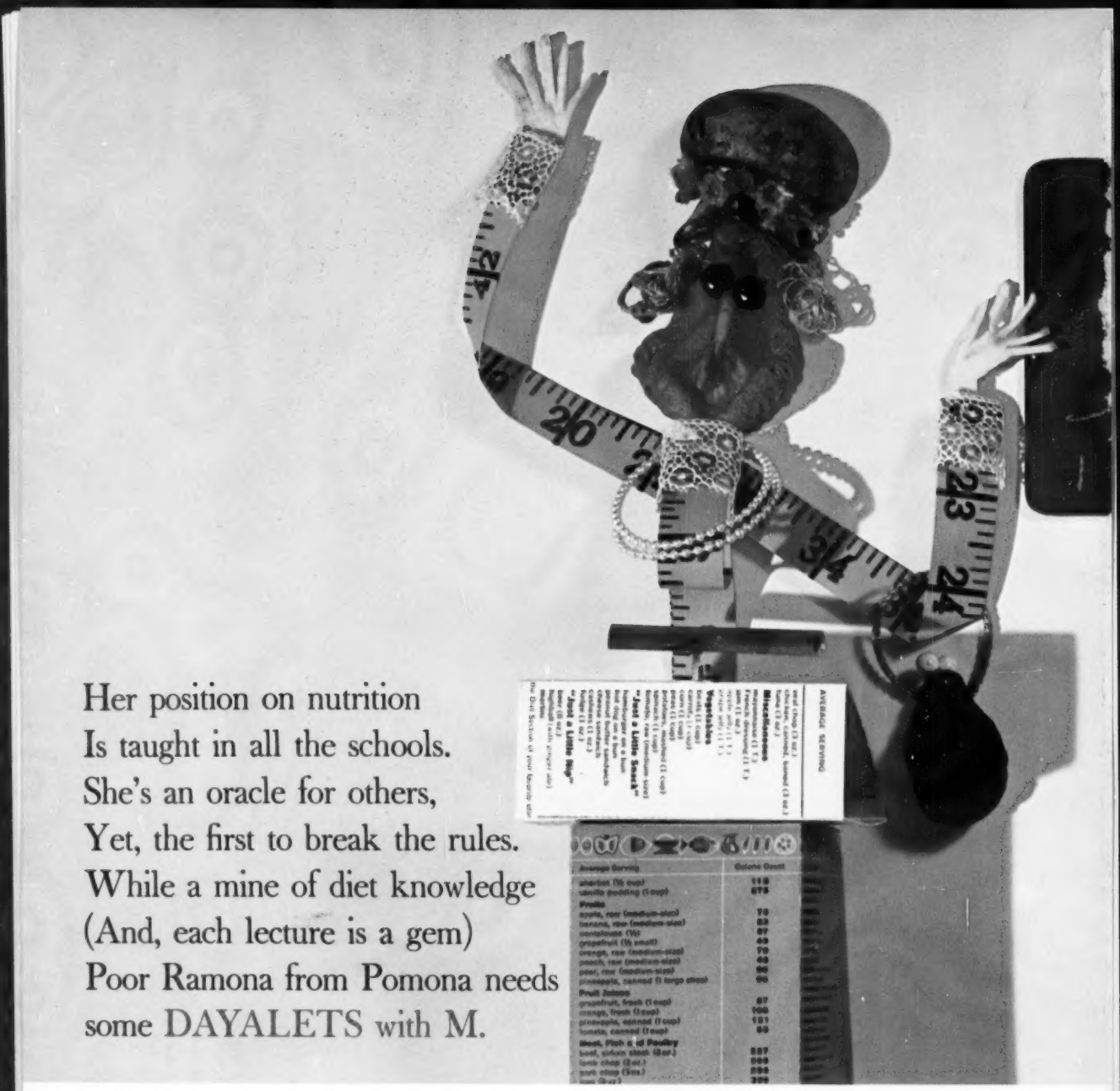


Her position on nutrition
Is taught in all the schools.
She's an oracle for others,
Yet, the first to break the rules.
While a mine of diet knowledge
(And, each lecture is a gem)
Poor Ramona from Pomona needs
some DAYALETS with M.


Likes, dislikes, and time schedules never interfere with her lectures, doctor, just her diet. She could live in a grocery store and still eat poorly. While Dayalets-M can't replace self-discipline, it can help insure optimal nutrition. Tablets are tiny, potent, and Filmtab-coated. Patients like taking them.

Filmtab® DAYALETS-M®...*essential vitamins plus 8 minerals in the most compact tablet of its kind*

ABBOTT

112070 Filmtab—Film-sealed tablets, Abbott

# NEW...made from 100% corn oil UNSALTED MARGARINE FOR HYPERTENSIVE PATIENTS

* contains only 10 mgs. of sodium per 100 grams
* contains 50% liquid corn oil and 50% partially hydrogenated corn oil
* has 30% linoleic acid—10 times that of butter

Because of the relationship of high-sodium intake to elevated blood pressure, new Fleischmann's Unsalted Corn Oil Margarine will prove to be a valuable addition to the dietary regimen of your hypertensive patients. It contains only 10 mgs. of sodium per 100 grams.

Fleischmann's Unsalted Margarine is made from 100% corn oil and contains both liquid corn oil and partially hydrogenated corn oil. Its linoleic acid content of 30% is three times higher than the 10% of regular margarines and ten times higher than the 3% of butter. This is the *only* unsalted margarine made from 100% corn oil.

The substitution of Fleischmann's Unsalted Corn Oil Margarine for butter or ordinary margarines in your hypertensive patients' dietary regimen has the added advantage of increasing their intake of high polyunsaturates . . . important because of their association with hypertension and atherosclerosis.

If your hypertensive patient needs sodium restriction, recommend Fleischmann's Unsalted. It has a light, delicate taste that he'll like. Tell him that it is available in his grocer's frozen food case.

Write now for physician booklet of 5 coupons—each coupon redeemable by your patient for 1 lb. of Fleischmann's Unsalted Margarine. Address Fleischmann's Unsalted Margarine, 625 Madison Avenue, N. Y. 22, N. Y. *Distribution presently limited in some areas.*

**In line with the suggestion of the American Heart Association to manufacturers, we are listing the fatty acid composition of Fleischmann's Unsalted (Sweet) Margarine:**

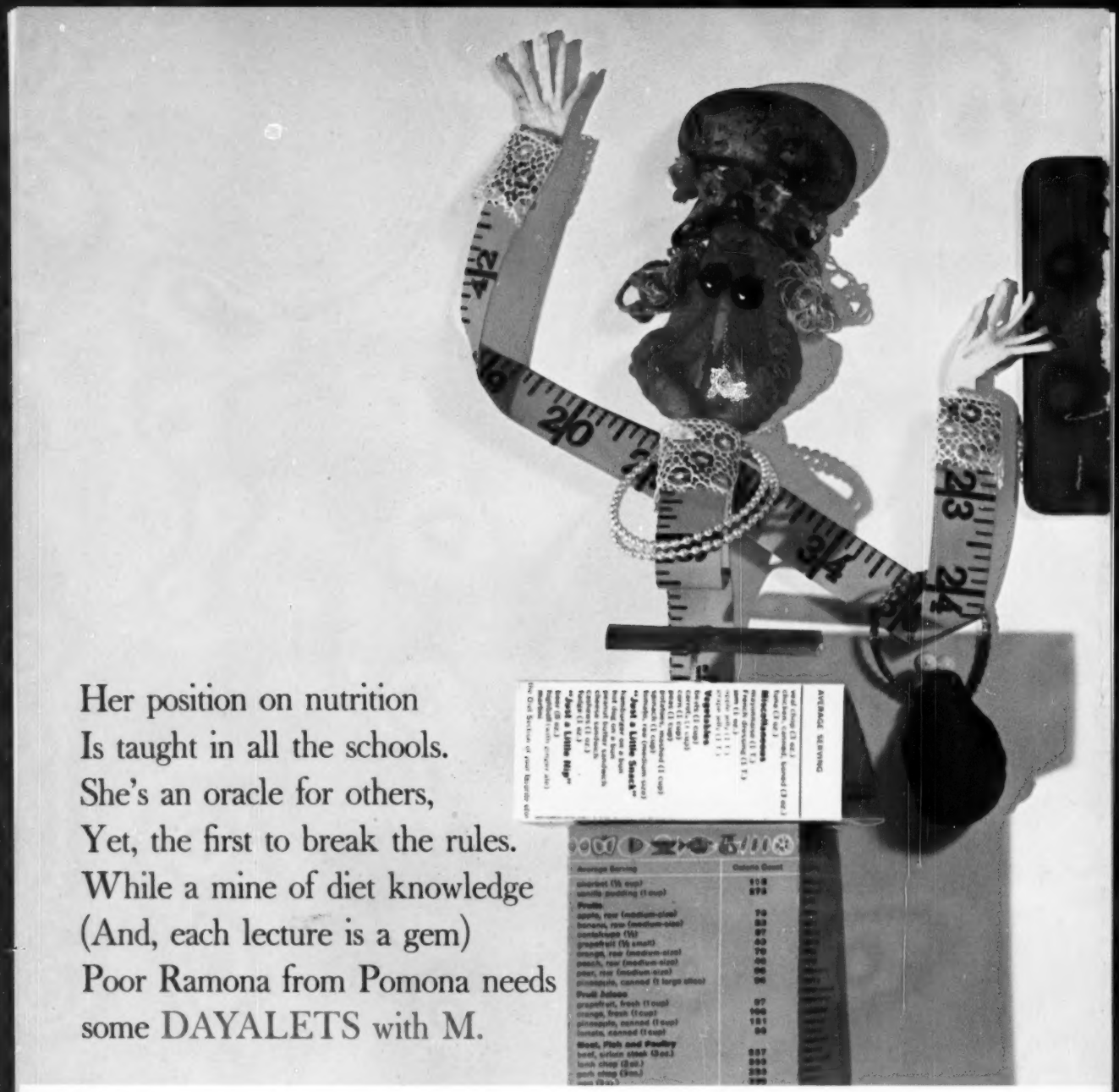
| | |
|---|---|
| **Unsaturated Fatty Acids:** | |
| Polyunsaturates | 30% |
| Monounsaturates | 50% |
| **Saturated Fatty Acids** | 20% |
| | 100% |

**AVERAGE DAILY INTAKE**
**Two Ounces or Eight Pats of Fleischmann's Corn Oil Margarine Will Supply**

| | |
|---|---|
| Corn Oil—Liquid | 22.7 Gm. |
| Corn Oil—Partially Hydrogenated | 22.7 Gm. |
| Iodine Value | 90-95 |
| Sodium (dietetically sodium-free) | 6 Mgs. |
| Linoleic Acid | 13.6 Gm. |
| Vitamin A (Adult's Need) | 47% |
| Vitamin A (Child's Need) | 62% |
| Vitamin D (Adult's and Child's Need) | 62% |


**Fleischmann's**
Fresh-Frozen in the green foil package in your grocer's frozen food case

**ONLY UNSALTED MARGARINE MADE FROM 100% CORN OIL**



Her position on nutrition
Is taught in all the schools.
She's an oracle for others,
Yet, the first to break the rules.
While a mine of diet knowledge
(And, each lecture is a gem)
Poor Ramona from Pomona needs
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Likes, dislikes, and time schedules never interfere with her lectures, doctor, just her diet. She could live in a grocery store and still eat poorly. While Dayalets-M can't replace self-discipline, it can help insure optimal nutrition. Tablets are tiny, potent, and Filmtab-coated. Patients like taking them.

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112070 Filmtab—Film-sealed tablets, Abbott

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**AVERAGE DAILY INTAKE**
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| Corn Oil—Liquid | 22.7 Gm. |
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## Meet the New MSMS Councilors

*Short biographic sketches of the new MSMS Councilors, elected at the 1961 Annual Session, appear below.*

### WILLIAM S. CARPENTER, M.D., Detroit

William S. Carpenter graduated from Northwestern University Medical School in 1936 and interned at Harper Hospital from 1936 to 1938. He was a resident in Surgery at Receiving Hospital from 1938 to 1941. From 1941 to 1946, he served in the United States Army Medical Corps.

He is a Diplomate of the American Board of Surgery, a Fellow of the American College of Surgeons, and is on the active staffs of Harper, Mount Carmel, Mercy, and Sinai Hospitals. He is Senior Instructor at Wayne University Medical School. He was a Director of Michigan Medical Service from 1958 to 1960, and has been a Delegate from Wayne County Medical Society for many years.

### HARVEY C. HANSEN, M.D., Battle Creek

Harvey C. Hansen was born and raised in Battle Creek, and attended the University of Nebraska. He received his medical degree from the University of Michigan in 1927, doing his internship and resident work at University Hospital in Ann Arbor.

Dr. Hansen served in the United States Air Force for five years and two months, in Regional Hospital in Orthopedic Surgery. He was discharged in 1946 as a Lieutenant Colonel in the Medical Corps.

He served as a Delegate to the Michigan State Medical Society from 1936 to 1961, except for periods in military service. He is one of the five physicians in Battle Creek who did the basic work on the original Blue Shield program.

His practice is limited to orthopedic and industrial surgery. He is Attending Orthopedic Surgeon at Community Hospital, Leila Hospital and the Battle Creek Health Center, and Orthopedic Consultant to the Veterans Administration Hospital.

### EDGAR E. MARTMER, M.D., Grosse Pointe

Edgar E. Martmer, born in 1901, received his M.D. degree from Wayne University in 1926. From 1927 until 1934, he was associate epidemiologist at the Detroit Department of Health. He was certified by the American Board of Pediatrics in 1934. He has been in private practice in Detroit from 1927 until the present time. He saw service in World War I from 1917-18, and also in World War II from 1942-1945.

He is Past President of the Detroit Pediatric Society, Past Chairman of the Pediatric Section of the Michigan State Medical Society and Past President of the American Academy of Pediatrics, Michigan Branch.

Since 1930, he has been an Associate Professor of Clinical Pediatrics at Wayne College of Medicine, and was the first recipient of the Clifford G. Grulee Award of the American Academy of Pediatrics. He is Chief of the Department of Pediatrics, Harper Hospital.

### D. ROEMER SMITH, M.D., Iron Mountain

D. Roemer Smith, M.D., is a graduate of the State University of Iowa, receiving his medical degree in 1925. He is a member of the Dickinson County Medical Society, the Michigan State Medical Society and the American Medical Association. He is a Fellow of the American College of Surgeons and a member of the Board of Trustees of Michigan Hospital Service. He is Chief of Staff of Dickinson Memorial Hospital and a member of the House of Delegates of the Michigan State Medical Society.

## Statement of Policy Re Allied Health Professions and Services in Hospitals

On September 24, The MSMS Council approved the following resolution:

Whereas, MSMS has from time to time received requests from various members for a statement of policy as to the relationship of medicine with allied health professions and services, such as chiropody, et cetera, and

Whereas, the need for and beneficial use in hospitals of the talents of members of the allied health professions and services is well accepted, and

Whereas, the extent of independent privileges to be granted in hospitals to members of allied health professions and services is a matter of great legal and professional concern, and

Whereas, experience and public safety considerations require that the medical staff of a hospital be organized and responsible to the governing board of the hospital and the public for the competence and quality of professional and medical care, and

Whereas, granting of privileges to a qualified podiatrist will not cause a hospital to be penalized by the Joint Commission on Accreditation, and

Whereas, one of the Joint Commission on Accreditation's requirements is that a hospital be accepted for listing by the American Hospital Association, and

Whereas, the American Hospital Association states that only Doctors of Medicine or doctors of osteopathy shall practice in hospitals listed by the American Hospital Association, and patients admitted for services other than by doctors so mentioned must have history and physical examination done by a physician on the staff of the hospital and a physician on the staff of the hospital shall be responsible for the patient's medical care throughout his stay, and

Whereas, the extent of professional medical services available and rendered varies at the local level with the size, type and staff organizations of the hospitals and community served, and

Whereas, the best interests of the public, hospitals, the medical profession and allied health professions and services will be better promoted by the formulation and adoption of appropriate guiding principles, therefore be it

RESOLVED: That the following statements of policy and principles be endorsed—

1. Hospital staff privileges should be limited to competent and qualified physicians and surgeons and all patients will be admitted to hospitals by them only.

2. The services of certain allied health professions and services which are necessary and proper to hospital function and treatments therein may be available within the limits of their technical skills, and the scope of their lawful practice, under the direction and supervision of a physician or surgeon member of the medical staff of the hospital, who is appropriately qualified in that field.

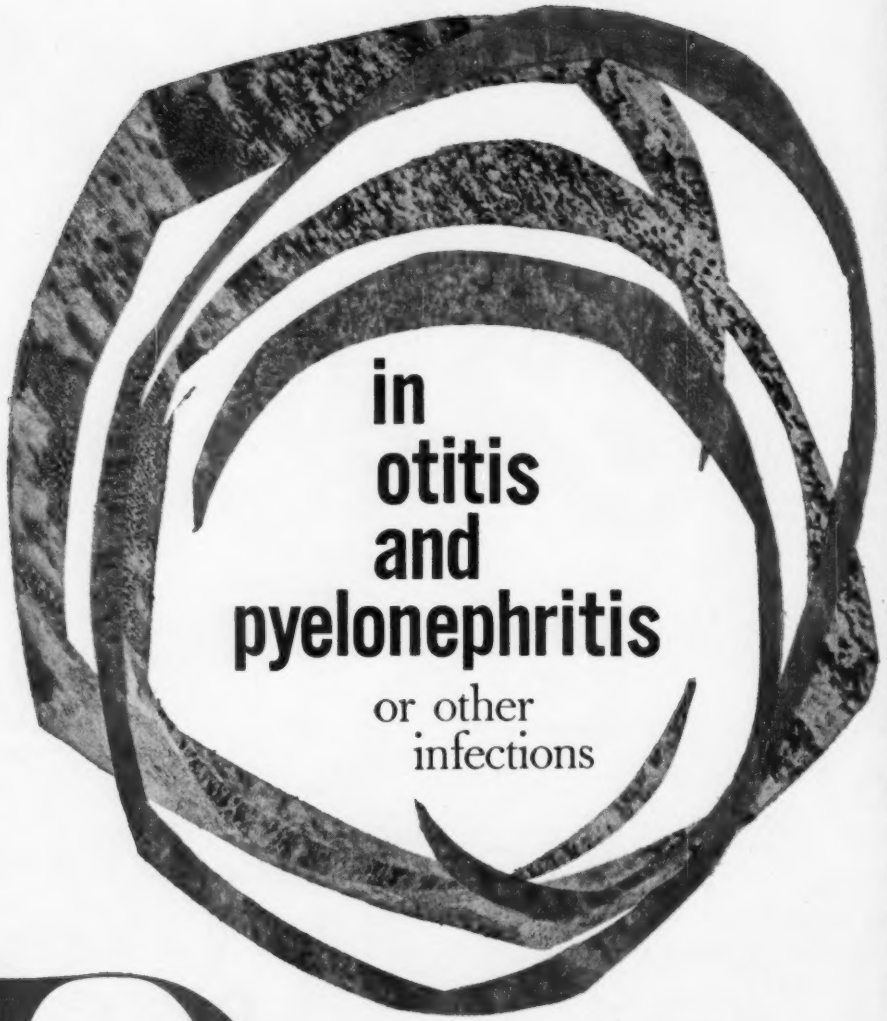
3. Such services in hospitals should be under the direction of the appropriate department or section charged with the responsibility for the maintenance of that type of service; and be it further

RESOLVED: That the following list of scientific professional and technical personnel in the health fields be a representative list of allied health professions and services that may be added to or deleted therefrom at the discretion of the governing body of MSMS:

1. Anatomists
2. Audiologists
3. Basal metabolic technicians
4. Bioanalysts
5. Biochemists
6. Biophysicists
7. Biostatisticians
8. Chiropodists
9. Clinical chemists
10. Corrective therapists
11. Cyto-technologists
12. Dietitians
13. Electrocardiographic technicians
14. Electroencephalographic technicians
15. Electrologists
16. Epidemiologists
17. Histologic technicians
18. Hospital administrators
19. Industrial hygienists
20. Inhalation therapy technicians
    (Oxygen therapy technicians)
21. Lay psychoanalysts
22. Masseurs and mechanotherapists
23. Medical illustrators
24. Medical record librarians
25. Medical social workers
26. Medical technologists
27. Microbiologists
    - Bacteriologists
    - Immuno-serologists
    - Mycologists
    - Parasitologists
    - Virologists
28. Midwives
29. Music therapists
30. Nutritionists
31. Occupational therapists
32. Opticians
33. Optometrists
34. Orthoptic technicians
35. Pharmacists
36. Pharmacologists
37. Physical therapists
38. Physiologists
39. Prosthetists
40. Psychiatric social workers
41. Psychologists
    - Clinical psychologists
    - Counseling and guidance psychologists
42. Public health educators
43. Radiation therapy technicians
44. Recreational therapists
45. Rehabilitation therapists
46. Sanitary engineers
47. Sanitary inspectors
48. Speech therapists
    (Speech pathologists)
49. Vocational counselors
50. X-ray technicians

and be it further

RESOLVED: That MSMS transmit this statement of policy to the constituent county societies.



# in otitis and pyelonephritis

or other infections

# antibiotic therapy with DECLOMYCIN

**CAPSULES, 150 mg., 75 mg.** *Dosage:* Average infections—150 mg. four times daily. Severe infections—Initial dose of 300 mg., then 150 mg. every six hours.

**PEDIATRIC DROPS, 60 mg./cc.** in 10 cc. bottle with calibrated, plastic dropper. *Dosage:* 1 to 2 drops (3 to 6 mg.) per pound body weight per day—divided into four doses.

**SYRUP, 75 mg./5 cc.** teaspoonful (cherry-flavored). *Dosage:* 3 to 6 mg. per pound body weight per day—divided into four doses.

**PRECAUTIONS**—As with other antibiotics, DECLOMYCIN may occasionally give rise to glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis or dermatitis. A photodynamic reaction to sunlight has been observed in a few patients on DECLOMYCIN. Although reversible by discontinuing therapy, patients should avoid exposure to intense sunlight. If adverse reaction or idiosyncrasy occurs, discontinue medication.

Overgrowth of nonsusceptible organisms is a possibility with DECLOMYCIN, as with other antibiotics, and demands that the patient be kept under constant observation.

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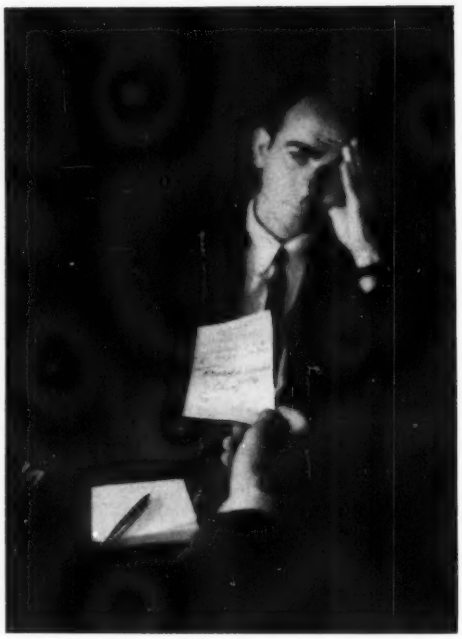
"It was the impression of the hospital staff that oxytetracycline [Terramycin] was not only better tolerated, but more effective than other antibiotics habitually used."

The results reported in this and many other studies confirm the vitality of Terramycin for broad-spectrum antibiotic therapy and demonstrate why —increasingly—the trend is to Terramycin.



## In brief

The dependability of Terramycin in daily practice is based on its broad range of antimicrobial effectiveness, excellent toleration, and low order of toxicity. As with other broad-spectrum antibiotics, overgrowth of nonsusceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions to Terramycin are rare. Aluminum hydroxide gel may decrease antibiotic absorption and is contraindicated.

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*Jacques, A. A., and Fuchs, V. H.: J. Louisiana M. Soc. 113:200, May, 1961.

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Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

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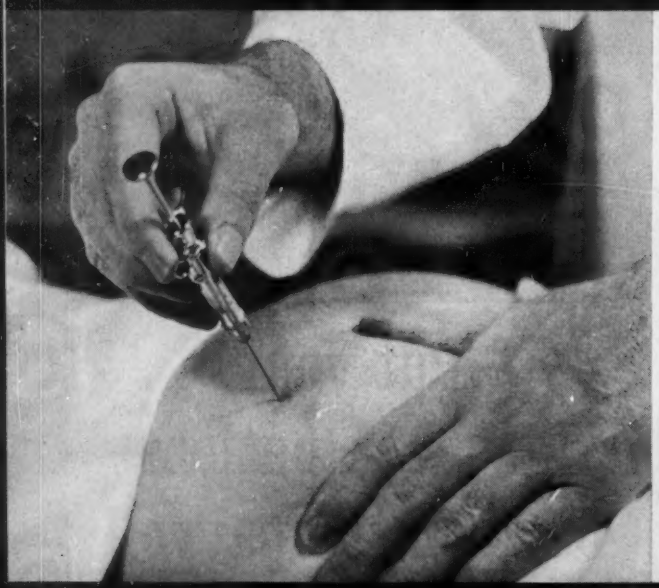

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*of this...*

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1. R. Lamb and E. S. Maclean, Penicillin V—A Clinical Assessment After One Year, *Brit. M. J.*, July 27, 1957, p. 191-193. 2. J. I. Burn, M. P. Curwen, R. G. Huntsman and R. A. Shooter, A Trial of Penicillin V, *Brit. M. J.*, July 27, 1957, p. 193. 3. J. Macleod, Current Therapeutics, *The Practitioner*, 178:486, April, 1957. 4. W. J. Martin, D. R. Nichols and F. R. Heilman, Observations on Clinical Use of Phenoxymethyl Penicillin (Penicillin V), *J.A.M.A.*, p. 928, March 17, 1956.

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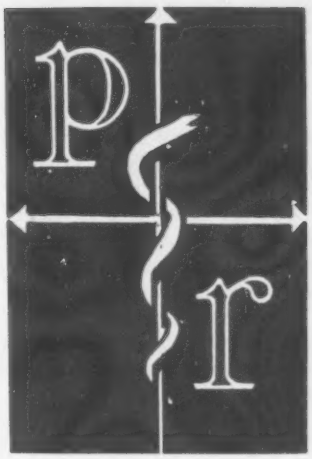
# *Medicine in Action*

## *Programs Outlined at AMA Institute Chicago, August 31, September 1, 1961*






*Second of a two-part report by R. W. Teed, M.D., to The Council of MSMS about the recent AMA Institute in Chicago—Part I appeared in the October issue.*

Reporting on the activities of the AMA, F. J. L. Blasingame, M.D., Executive Vice President of AMA, pointed out that although AMA membership is at an all-time high (180,000), too many physicians remain outside. A program of invitation and solicitation should be carried out to attract these men.

Regarding meetings, he asked if improvement could not be made. He suggested biennial or triennial conferences on various subjects such as rehabilitation, nutrition, and medical education.

He stated that while undergraduate medical education tries to be objective in dealing with curricula and other programs, faculties have not been used efficiently to accommodate more students. He suggested the utilization of beds in private hospitals in cities having university medical schools, and the use of international teachers such as those from Cuba, East Germany, and elsewhere.

* * *

THE DEVELOPMENT of a true self-policing program could be of the greatest value to medicine, he stated, and suggested that Medical Ethics be more than a term.

A program to study medical care costs would also be of great value, particularly if it led to a means by which costs could be reduced.

Regarding medical economics and voluntary insurance, he stated that the AMA should improve its library on the subject, and stimulate research. Much still needs to be done, and the AMA should lead.

In regard to the AMA legislative program, he urged continued efforts in our opposition to the King-Anderson Bill. Medicine must remain alert to the danger, and support the AMA in this fight. At present, from 2 to 4 per cent of the AMA budget is used in this effort, and it does not seem now that any more will be needed.

Dr. Lyman Smith (AMA Honors, Scholarship and Loan Program) spoke on a subject which has recently been studied carefully by the MSMS Subcommittee on Medical Recruitment. He pointed out that the medical student pays more than double in fees than the Ph.D. candidate, while averaging about $2000 in scholarships for 4 years, in comparison with the Ph.D.'s assistance of about $8000. Thus there is an 8-1 disparity against the medical student. It is not surprising therefore to find that the majority of medical students come from families receiving more than $10,000 per year.

* * *

THE AMA IS TRYING to attract a larger number of high-

quality students, but needs the help of state societies. In this effort the AMA can give (1) leadership, (2) ideas, (3) financial support, and (4) honors program stressing scholarship.

The talk given by Professor Paul Peterson (Associate Professor of Journalism, University of Omaha, Nebraska) was particularly valuable because of its frank nature, and because it represented ideas actually held by people. While he spoke of the AMA, his remarks had equal value for state societies.

He stated that the public image of the AMA is not favorable; that it is chillier than that of 10-12 years ago. Evidently, the esteem of the AMA has not kept pace with medical advances. The public believes the AMA is characterized by a negative attitude, and holds that it is a tight guild seeking to keep its membership limited and its income high. Only when threatened does it seem to come to life. That these opinions are incorrect is unimportant—the fact is that they are held. One physician charged with malpractice makes the whole group look bad.

Many people believe that the goals of the AMA are not consistent with the good of the public, but that it is protecting its income. Some think the "M" stands for money. The average citizen believes that the AMA does not touch him directly and is not concerned with him.

Governor Pat Brown of California was quoted as saying that if the AMA does not clean its own house, the government will step in and do it. He labelled 4,000 doctors as being incompetent, although he gave no indication as to how this judgment was reached.

* * *

ADVANCES IN MEDICINE have been so spectacular that the public has come to expect miracles daily. Alton Blakeslee was quoted as saying that the public thinks we should eliminate heart disease, cancer and other dread diseases. If a patient is not cured of his sore throat at once he loses confidence.

There have been an increasing number of articles in magazines favorable to medicine, and these should have a good effect. These, plus the work of public relations men, are good, but they cannot create something that does not exist. The key is in the hands of the individual doctor.

## *Stresses Importance Of Speakers Bureaus*

*(The importance of speakers bureaus in effectively telling the story of Medicine is being stressed by the American Medical Association. A spokesman for the AMA Speakers Bureau offers this advice to interested component societies and specialty groups)*

"You would be surprised at how many physicians do not know the AMA story. It has been told literally thousands of times across the nation. Yet major public figures are still telling Americans that the AMA opposed Social Security, that the AMA was against the Red Cross blood program, that the AMA opposes all progressive legislation for the good of the people.

"If you cannot answer those three charges about Social Security, Red Cross blood programs, and opposition to all legislation, you definitely need to read the booklet 'Basic Facts About the AMA.'

"A speakers bureau has a goal—getting the facts to as many members of the public about this vital aging issue in the most effective manner possible. This helps create a climate for action to aid the aged and other needy under freedom of medicine and preservation of the doctor-patient relationship, rather than under government medicine.

"The first task is selecting a list of speakers. You are that first group, and I hope there will be many others to follow. Just what makes a good speaker is a hard thing to determine.

"The second step is training the speakers. Actually, the training process continues through a speaker's career. The speaker is always learning and willing to learn. Part of the training is technique. Another equally important part is keeping informed on the issues. No matter how good the speaker is, he or she must know the facts.

"Now you have a group of trained speakers awaiting action. They need to be put to work, which means the public must be told about them. There are several methods of doing this. One is to put out a brochure telling about the speakers bureau, its purpose and goals, some of the members who are best known, and how a group or organization gets such a speaker. Circulate this brochure to every group in the state which uses speakers.

"Another method is to write a letter to the organization telling them the same information. A good combination would be a covering letter along with a brochure.

"This should and will bring in quite a few requests. More will follow as the bureau becomes better known and the word gets around that this is a good way to have a top program. But follow-up contacts with organizations should be made whenever society members are dealing with a specific group.

"Most times the story about your talk reaches more persons than your talk. So it is a must that there be advance publicity and a story on the talk. If they need an advance text, be sure they get it.

"As you can see, a speakers bureau has tremendous potential, and each of you has the opportunity of being right in the middle of it. You can gain favorable publicity for the Michigan State Medical Society and AMA. You can establish good liaison with organizations and a basis for future cooperation, including resolutions opposing this approach to medical care for the aged. You can discover and develop future Ed Annises. You can make a sound contribution to communications of organized medicine. You can help sell free enterprise and individual freedom."

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**enhances physician-patient rapport** As it removes tension/anxiety, fear and frustration, **LISTICA PROMOTES EUNOIA***—"a normal mental state." It bares the patient's true somatic condition, and facilitates diagnosis and therapy. Patients are more tractable to concomitant drug therapy, respond better, faster.

**without known toxicity or contraindications** Listica is safe, as well as effective. Chronic studies[14] in rats (12 months) and dogs (6 months) were free of toxic manifestations at oral dosage levels as high as 200 mg./kg./day (approximately 10 times the recommended human dosage). No macroscopic or microscopic changes in tissues, organs or blood indicative of toxicity were observed, even at doses up to 320 mg./kg. In humans, there have been no adverse blood, urine or cardiac changes; liver profiles were negative, and jaundice has not been noted.

**without serious side effects or habituation** During three and one-half years of clinical study in 1,759 patients,[2-13] Listica has produced no serious side effects. Less than 4% of patients experienced any side effects, and these were invariably minor and transient. Most frequent (38 cases) was mild drowsiness, which disappeared after the first few days of Listica therapy. Habituation, cumulative effects, or withdrawal symptoms have not been noted, even in patients taking Listica as long as two years.

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References:

[1]Bastian, J. W.: Classification of CNS Drugs by a Mouse Screening Battery. To be published in Intern. Arch. de Pharmacodynamie; [2]Hubata, J. A., and Hecht, R. A.: Review of Clinical Use of Hydroxyphenamate (Listica) in 1,759 Patients. To be published in Clinical Medicine; [3]Taub, S. J.: Management of Anxiety in Allergic Disorders—New Approach. To be published in Psychosomatics; [4]Cahn, B.: Experience with a New Tranquilizing Agent (Hydroxyphenamate). *Ibid;* [5]Davis, O. F.: On Use of Hydroxyphenamate in Anxiety Associated with Somatic Disease. To be published; [6]Alexander, L.: Effect of Hydroxyphenamate on Conditional Psychogalvanic Reflex in Man. Supplement to Diseases of the Nervous System, Sept., 1961; [7]Cahn, B.: Effect of Hydroxyphenamate in Treatment of Mild and Moderate Anxiety States. *Ibid;* [8]Cahn, M. M., and Levy, E. J.: Use of Hydroxyphenamate (Listica) in Dermatological Therapy. *Ibid;* [9]Eisenberg, B. C.: Amelioration of Allergic Symptoms with a New Tranquilizer Drug (Listica). *Ibid;* [10]Friedman, A. P.: Pharmacological Approach to Treatment of Headache. *Ibid;* [11]Greenspan, E. B.: Use of Hydroxyphenamate in Some Forms of Cardiovascular Disease. *Ibid;* [12]Gouldman, C., Lunde, F., and Davis, J.: Clinical Trial of Hydroxyphenamate in Alcoholic Patients. *Ibid;* [13]McLaughlin, B. E., Harris, J., and Ryan, E.: Double Blind Study Involving "Listica," Chlordiazepoxide, and "Placebo" as Adjunct to Supportive Psychotherapy in Psychiatric Clinic. *Ibid;* [14]Bastian, J. W.: Pharmacology and Toxicology of Hydroxyphenamate. *Ibid;* [15]Bossinger, C. D.: Chemistry of Hydroxyphenamate. *Ibid.*

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1. Barden, F. W., et al.: J. Maine M. A. 46:99, 1955.
2. Ford, R. A., and Blanchard, K.: Journal-Lancet 78:185, 1958.

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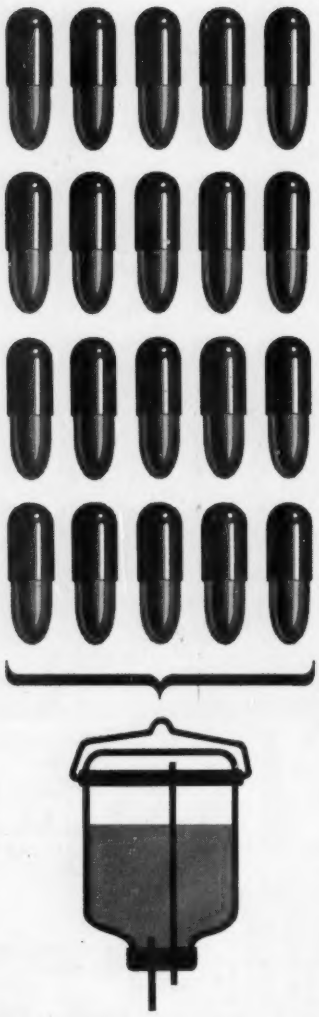

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# Successful Resuscitation of Cardiac Arrest In Acute Coronary Occlusion

Edward J. Klopp, Jr., M.D.
Lloyd E. Verity, M.D.
Sherwood B. Winslow, M.D.
Battle Creek, Michigan



THE PROBLEM of cardiac arrest has been of interest to surgeons for many years and its occurrence within the operating room has been well appreciated to the point that no surgeon who has not been thoroughly indoctrinated into the steps of cardiac resuscitation, will undertake an operation today. However, cardiac arrest outside the operating room has occurred rather frequently. The number of patients who have been successfully resuscitated, in such instances, is not completely known. The cause of cardiac arrest outside the operating room has usually been ascribed to acute myocardial ischemia due to sudden coronary artery occlusion. It is a case of this type which we shall present at this time. Recently, we have also encountered cardiac arrest following accidental industrial electrocution, which will be the subject of another communication.

Reagan et al[13] and Beck et al[2] presented the first two cases of successful resuscitation outside the operating room in 1956. Since that time, interest has increased to the point that in some hospitals regular teams are available for cardiac resuscitation on all patients who come in with a serious "heart attack." The case we are about to present occurred in a hospital under rather fortuitous circumstances, but without an organized team.

## Case Presentation

L. R. K., a physician, aged fifty-two, was working on his charts in the medical library of the Leila Y. Post Montgomery Hospital, when he was suddenly seized with severe upper abdominal and low substernal pain. There was a constricting sensation, with a feeling of a weight on his chest, but without radiation of the pain. He was given morphine sulphate, grs. ¼, hypodermically and transported to the only available bed in the hospital, located in the treatment room on the surgical floor.

Prior to this attack, he had been seen by one of his very close friends, a physician who discussed non-medical matters with him, and he seemed perfectly well. Therefore, we can assume that this attack, which occurred shortly after 9:00 a.m., had no premonitory symptoms.

Upon examination, slight pallor and sweating were observed, but no shock. The heart tones were clear and distinct; there were no murmurs and no irregularity. The blood pressure was 120/74. The patient denied any previous history of angina or prior episodes of similar pain. Thirty minutes later, the patient still complained of substernal distress. In the presence of a physician, he had a sudden convulsive seizure. The head, neck and chest became intensely red (lobster red). Shortly, cyanosis occurred, and respirations ceased. His visitor pounded upon the patient's chest and called for help. The diagnosis of cardiac arrest was confirmed, and a thoracotomy was decided upon. Of interest, and of some embarrassment, was the fact that no scalpel

could be found on the surgical floor. Therefore, the unprepared chest was opened with a penknife, and massage was started through the intact pericardium while an anesthetist was summoned and a thoracotomy set obtained. The period of time between the convulsive seizure and the opening of the chest is estimated at between five and seven minutes.

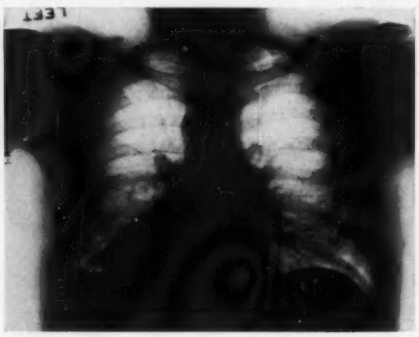

Fig. 1

After a rib spreader was inserted, the pericardium was opened and massage directly on the heart was initiated. An electrocardiograph revealed gross irregularity with intraventricular block. During the process of massage and attempted resuscitation, it was noted that ventricular fibrillation would occur and spontaneously disappear. Circulation was maintained by cardiac massage, while oxygenation of the lungs was accomplished by mask breathing with an anesthesia machine for somewhere between one and one-half to two hours. During that period of time, small amounts of adrenalin were injected directly into the right ventricle (during the periods when no gross fibrillation was observed). A continuous drip of 4 cc. of levophed and 250 cc. of normal saline was started into the ascending aorta (both coramine and procaine had been used without effect). A pacemaker, with electrodes attached directly on the heart, was used without effect. Finally, during a period of very obvious gross ventricular fibrillation, a defibrillator was applied with 110 volts and 0.5 amperes, giving three successive shocks. The rhythm immediately changed from fibrillation to sinus rhythm. During the last twenty minutes of massage, spontaneous respirations occurred. The patient thrashed about during the closure of the chest and insertion of intercostal chest tube. At no time was the patient moved from the treatment room.

Intravenous infusion of levophed 8 cc. to 1000 cc. of glucose was necessary to maintain the blood pressure above 80 mm. Hg., systolic. The drip was regulated in an attempt to maintain the pressure at 100 mm. Hg., systolic. The patient was completely irrational, requiring sedation of sparine and morphine for the first forty-eight hours. At the end of this time, he asked a few rational questions, but had complete loss of memory. On the fourth day after the cardiac arrest, cerebration was returning. At this time, his pulse was rapid and of rather poor quality, although he had received digitalization dosage of cedilanid. On the second postoperative day, he started taking coffee, and a soft diet on the third day. On the fourth postoperative day, his temperature rectally was 102.8 degrees F., and thereafter gradually went down to a normal level. By the tenth postoperative day, his temperature was normal for the full twenty-four hours. His condition generally improved, and his mental faculties returned to normal. Râles heard at the base of his lungs for the first four or five days postoperatively gradually disappeared. The patient was discharged from the hospital approximately six weeks later. At the time of discharge, he was able to walk in the halls of the hospital and to talk intelligently with those around him.

Chest x-ray examination revealed normal postoperative reaction in the pleura. At the time of closure, the pericardium was left open. On some of the radiographs, it appeared that a ventricular aneurysm might be present. However, a radiograph taken four months later (Fig. 1) showed some enlargement of the left ventricle, but no aneurysmal bulging, and this was confirmed by fluoroscopic examination.

Electrocardiograph taken four months afterwards showed the healing phase of an anteroseptal-lateral infarct with considerable myocardial ischemia (deeply inverted T waves in lead 1, and all precordial leads) (Fig. 2). There was no elevation of segments to suggest the presence of a ventricular aneurysm.

The laboratory tests gave essentially normal findings except for a sedimentation rate of 62. The total cholesterol was 231 mgm. per cent; NPN 35 mgm. per cent; serum electrolytes of sodium, potassium and chlorides were normal.

The past history of the patient revealed that he had scarlet fever, the usual childhood diseases, one episode of a renal calculus which passed spontaneously, and a tonsillectomy and adenoidectomy. Of interest in his family history was the fact that his father lived to be eighty-four, died of an enlarged heart, and had one non-disabling stroke. His mother also died at the age of eighty-four of generalized arteriosclerosis. One brother died in infancy of scarlet fever. Another brother died in infancy of meningitis. One brother died at the age of forty-nine of carcinoma of the kidney. He has three sisters and one brother living and well.

At the present time, this patient remembers the pain which occurred when he was in the library, remembers receiving the hypodermic injection and being placed in a wheel chair. From this point on, his memory skips until about three to four days postoperatively. Aside from this amnesia, there are no mental aberrations. This patient has done physical work, in the form of pulling up tree roots, and has resumed his duties as president of his county medical society.

## Discussion

This case presents several interesting features. The delay before establishing oxygenation of the brain by direct massage of the heart appears to have been prolonged. However, the physician in the room at the time of the convulsion did pound on the chest. It is entirely possible that he was able to maintain oxygenation of the brain in this manner, as recently described by Kowenhoven et al, as "closed chest car-

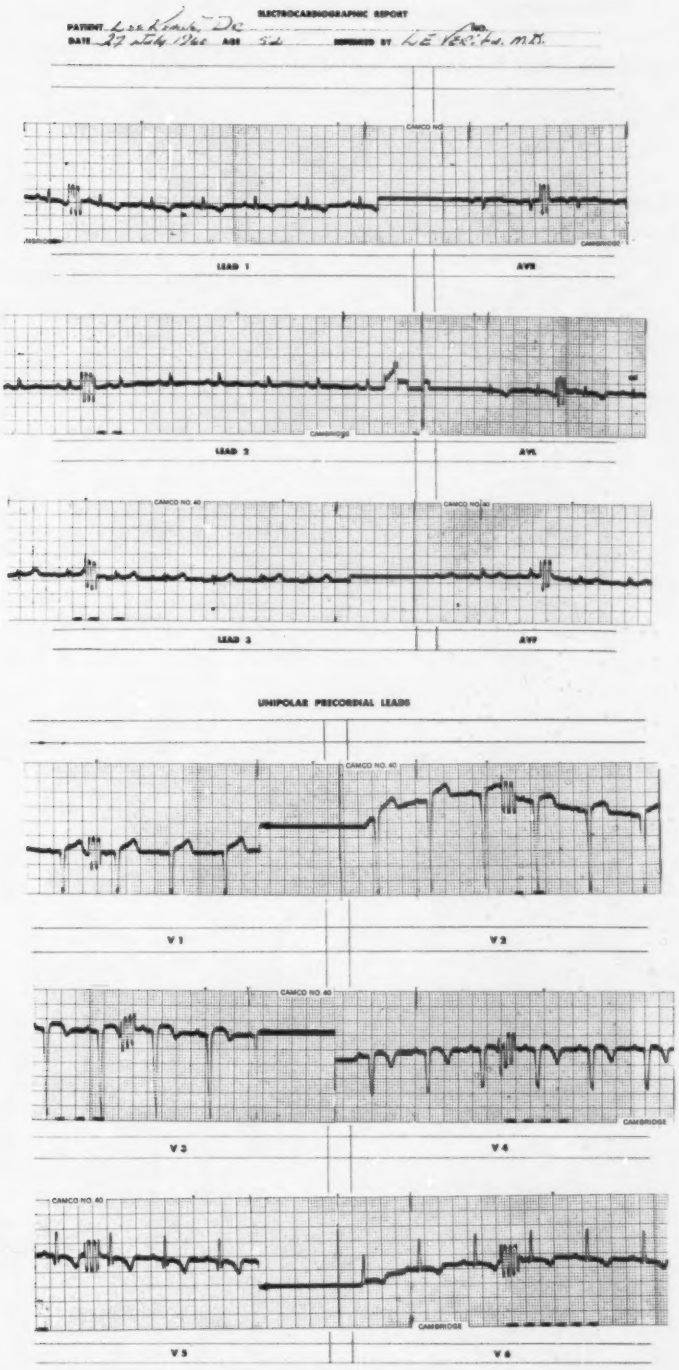
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Fig. 2

diac massage."[7] In addition, a case was reported by Schlackleman et al in 1958, "Cardiac Arrest Following Abdominal Operation,"[15] when ninety minutes elapsed before opening the chest to massage the heart directly. Prior to opening the chest, various measures, such as use of the pacemaker and compression of the chest, were used without obvious effect, and this patient made a full recovery.

Stephenson,[22] in his study of more than 1200 cases of patients with cardiac arrest, found that of the survivors, only six per cent survived if the arrest was over four minutes before massage was done and ninety-four per cent if massage was instituted within that time. In cases of Turk et al,[25] there were only two successful cardiac resuscitations in twenty cases of cardiac arrest occurring in the patient's room, and one in a constant temperature room. Out of forty-four cases of cardiac arrest, there were seven survivors, four occurring in the operating room. Stahlgren et al[21] reported twenty-five patients with cardiac arrest outside of the operating room upon whom resuscitation was attempted. One patient survived (four per cent).

The penknife, as an instrument to open the chest, has been used in one case reported by Brown et al.[5] Successful resuscitation outside the operating room of a physician was first reported by Beck et al[2] in 1956.

There are at least eleven cases recorded in the literature of successful cardiac resuscitation outside of the operating room. There may be many more that have not been reported. We feel that this case points out the growing need for facilities for cardiac resuscitation, not only in the operating room, but in other areas of the hospital as well. Although the instances of successful resuscitation at the present time are not great, with more experience and with a greater number of trained personnel available, the patient with severe myocardial infarction has a better chance to survive cardiac arrest.

## Summary

A case of cardiac arrest in a physician, aged fifty-two, occurring outside the operating room, and following an attack of coronary artery occlusion, has been presented with a brief review of the literature.

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# Superficial Phlebitis of the Breast And Chest Wall: Mondor's Disease

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THROMBOPHLEBITIS of the anterior chest wall and mammary region occurs infrequently, and since 1939 has commonly been referred to as Mondor's disease in keeping with French surgeon Henri Mondor's description of "string phlebitis of the chest wall." The first recognition of this clinical entity was credited to Flagge, who in 1869 described a breast which "presents a deep, puckered groove, looking exactly as if it were a scar after an operation for removal of the organ and extending into the axilla." Farrow[2] reported forty-three cases from a large Breast Service at Memorial Center, New York, in 1955 (covering an eight-year period, 1947 through 1954) and found fifty-eight additional cases in the world literature. Kaufman[5] reported seven cases a year later, Karlan and Traphagen[4] described a case in 1957, and Honig and Rado[3] added eight more cases in 1960.

At times, this condition has been confused with cancer, leading to uncertainty of the correct treatment and emphasizing the importance of bringing Mondor's disease, a completely benign condition, to the attention of physicians and surgeons who may not be aware of its existence. It has also been confused with scleroderma, as noted in one of the following case reports.

This is a phlebitis and periphlebitis of the lateral thoracic or thoraco-epigastric vein, often spreading over the chest wall and by communicating branches to the superficial venous plexus over the anterior abdominal wall. Although injury, surgical trauma and infection play major roles in its inception, the phlebitis may be spontaneous or idiopathic, with an obscure etiology. About one-third of the reported cases were in men but the typical case is a woman between the ages of twenty-one and sixty-five years, with heavy or "fleshy" breasts, and the left breast or chest wall is most often affected. Rarely, there is bilateral chest involvement. Mondor's "syndrome" is entirely distinct from an entity Waugh described as mammary arteritis, a discrete nodular breast tumor requiring excision biopsy to exclude neoplasm. This has been compared to temporal arteritis.

Usually, there are symptoms of sudden pain and tenderness of mild to moderate severity. This pain may be referred to the axilla or to the abdomen; may be aggravated by raising the arm, by exercise which stretches the abdominal muscles, or by deep breathing. In some instances, the patient has noticed a groove in the skin or a subcutaneous cord; occasionally, there is a linear reddening of the skin.

A tender fibrous subcutaneous cord from 3 to 5 millimeters in diameter, of variable length up to 28 centimeters, is the characteristic physical finding. This is attached to the skin, and in the typical case when the breast or arm is raised, a narrow and shallow groove can be seen in the skin. The linear depression may bifurcate into one or more branches. The cord has a consistency similar to that of the vas deferens, usually is solid, but may have a beaded character, and fades indistinctly into the subcutaneous fat. When cut, it retracts suddenly like a cut bow string.

There is no consistent time interval for the signs and symptoms; this is a self-limited condition which does not appear to be influenced by any specific treatment. Farrow states that "symptoms had been present from a few days to four months before examination; average duration was about two weeks." In his series, symptoms usually subsided in about two weeks, and the palpable cord-like structure disappeared in six weeks to two months, although ten months were required for its disappearance in one case. Although he had follow-up examinations of only eight of his forty-three cases, there were no recurrences one to six years after recovery.

Rest and applications of warm compresses are sufficient to relieve symptoms in the majority of cases. Antibiotics and anticoagulants have been used without any definite physical response other than some relief of the pain and tenderness (but did not cause early disappearance of the subcutaneous cord in any of the cases reported).

In instances of superficial thrombophlebitis of the breast and chest wall of obscure origin, where malignancy cannot be ruled out, a biopsy should certainly be done. Calvet[1] reported a patient in whom a breast tumor was excised locally and found to be malignant, but radical mastectomy was refused. The woman returned later with a cord-like strand extend-

ing from the involved breast to the umbilicus, but this time the surgeon reasoned erroneously that this was lymphatic permeation by carcinoma, rendering the lesion unsuitable for surgical removal. It is now known that benign superficial thrombophlebitis occasionally follows biopsy of the breast and should not be confused with carcinoma.

*Case 1.*—A. B., a white, active registered nurse, aged forty-five, underwent partial right mastectomy (nipple and large central wedge resection, removing slightly less than one-half of the breast) on March 23, 1961. Frozen section was negative for malignancy, and the final pathological report was benign cystic mastitis. The indication for this operation was redness and a moist vesicular eruption of the right nipple and areola of three months' duration, a recurrent lesion which had its onset in November, 1958. Biopsy of this same nipple and excision of a ductal area above it had been done on March 22, 1960, with a pathological diagnosis of benign mastitis.

There was persistent serous drainage from the incision, and on April 26, 1961, the patient noticed soreness well below the right breast. Examination revealed a linear area of phlebitis, cord-like, from the breast down through the abdominal wall to the iliac crest. Coumadin therapy seemed to relieve the tenderness, along with hot compresses. She was given Chymoral tablets for a few days without much change in the tender cord. An examination done June 6 showed persistent intermittent tenderness in the abdomen, and a "beaded" cord was palpable to the level of her umbilicus. A final examination on August 4, almost five months postoperatively, revealed a firm cord extending from the breast to a point just below the right costal margin and no definite tenderness. This complication produced enough discomfort to cause the patient to stop work for almost ten days, two weeks after she had returned to her hospital duties, with the breast incision well healed.

*Case 2.*—M. H., a white waitress, aged thirty-four, entered the hospital on May 2, 1955 for excision of a small, red, indurated lesion above the left nipple, which was first noticed three months before admission. The lesion was removed on May 3 with pathological report of benign fibroadenoma. Healing was slow, requiring almost four weeks. On September 15, a "raised streak 5 centimeters in length" was biopsied and reported as early scleroderma or some other collagen disease. The patient returned for examination on October 7, 1955, because of tenderness below the left breast, and a tender cord could be felt from the left nipple well down onto the chest wall. This disappeared in a few weeks and was not apparent on reexamination on December 12, 1955.

Because of persistent tenderness and firm swellings above and beneath the left nipple, a wedge resection of this area was done on May 28, 1956, and the tissue was reported as fibroadenoma and normal scar tissue. On June 27, one month later, a ropy cord was noted under the left breast, coursing down onto the chest wall. Three weeks later, on July 18, the tender cord extended down onto the abdomen and persisted for several months, being described as a "very fine line" from breast to abdomen on an examination done December 1, 1956. Small doses of oral Cortisone for a period of four weeks relieved the tenderness. The patient was hospitalized on July 19, 1961 for a back injury, and there was no evidence of the old phlebitis of the left chest wall.

*Case 3.*—D. R., a white housewife, aged twenty-four, complained of painful breasts in 1951, clinically diagnosed as benign cystic mastitis. Because of persistent pain and a discrete swelling in the left axilla, she was hospitalized, and on April 6, 1954, two separate incisions were made to remove the axillary gland and a small cystic area above the left nipple. The pathologist reported the lesions as cystic mastitis with adenosis and benign lymphadenitis. Both incisions healed normally.

Four months later, on office examination done August 2 (because of recurrent pain in the left breast and chest), there was a firm, tender cord extending from the left nipple upwards to the left clavicle. The patient was given Cortef 20 milligrams twice daily for one week, then once daily for another week plus the use of hot packs. The symptoms and cord disappeared in four weeks. On examination October 6, 1954, there was a small, tender matted area above the left nipple, one palpable left axillary node and a few palpable left cervical lymph glands, but the cord had disappeared.

New areas of swelling, tenderness of the left breast and the persistent left axillary gland led to hospitalization again and on July 11, 1955, a mass above the left nipple and a large gland of the left axilla were removed. Pathological diagnosis was adenosis, benign, and non-specific lymphadenitis. The incisions healed promptly, and the phlebitis did not recur. When last seen, on May 25, 1960, there was no apparent lesion of the breast or chest wall.

## Summary

Three additional cases of Mondor's disease are presented, each one following a minor surgical procedure on the female breast. Scleroderma was the original diagnosis in Case 2, but was definitely ruled out in the subsequent illness. Steroid therapy, not mentioned in the previous medical literature, was used in two of the cases and appeared to relieve tenderness, although there was no positive evidence that it hastened recovery. The benign nature of this disease and its eventual complete recovery is emphasized.

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25 *West Michigan Avenue*

# Cerebral Angiography in a Community Hospital

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J. C. Griffith, M.D.
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CEREBRAL angiography, introduced in 1927 by Egas Moniz, has assumed a major role in the objective diagnosis and localization of intracranial lesions. As the technique has become simplified and the scope enlarged, this examination has found application in the small community hospital as well as the medical center. This development has been responsible in part for the increased practice of neurological surgery in the smaller cities.

The indication for angiography is simply the suspicion of a lesion of the brain or its vascular supply. There are no valid contraindications in a case where there is a reasonable chance of improving the patient's condition as a result of obtaining more precise knowledge of the identity and location of the pathologic condition.

Angiography has several advantages over air studies. It is equal or superior to ventriculography in the information derived. It can be readily done on an outpatient. Perhaps most important is the lack of physiologic change in the examined patient so that a positive angiogram does not require immediate surgery.

The examination ordinarily is done under local anesthesia by the percutaneous technique. Sodium pentothal anesthesia has been reserved for children and very nervous or irrational adults. The cutdown technique with cannulation of the artery is used only when percutaneous attempts are unsuccessful. A dosage of 10 cc. of Hypaque sodium is used for each injection. This has resulted in good contrast and only two serious reactions in the entire series. Both patients showed temporary convulsive seizures and cyanosis. There have been no paralyses or deaths as a result of these studies.

Our radiographic equipment is conventional and multipurpose with exposures in the 60 to 85 kv. range, 200 ma. at 1/4 second. A single anteroposterior view is taken on the first injection and two lateral views on the second. These are made without moving the patient with a horizontal beam and grid cassettes, and satisfactory filling in both the arterial and venous phase is easily demonstrated. We have not found the lack of a rapid film changer critical in a single case and, therefore, we are unwilling to accept the increased radiologic exposure inherent in this equipment, despite its advantages in some areas.

In the four years since this study was initiated, we have performed 233 cerebral angiograms on 181 patients, ranging in age from twenty-two months to eighty-five years. The ratio of male to female patients was 5:4. Our results are summarized in the accompanying tabulation.

| | | |
|---|---|---|
| Negative | 93 | |
| Tumor | 25 | |
| Aneurysm | 20 | |
| Vascular plaque and/or thrombus | 19 | |
| Arteriovenous malformation | 10 | |
| Subdural hematoma | 8 | |
| Technically unsatisfactory | 4 | |
| Abnormal unclassified | 2 | |
| Total | 181 | patients |

Each patient is classified by his primary diagnosis at the time of the study. Several of the "tumors" proved to be metastatic, one an intracerebral hematoma without a traumatic history, and one a cystic hygroma over the temporal lobe. Many patients had two or more aneurysms but are recorded as "aneurysm" only. In the same vein, two of our patients had bilateral subdural hematomas (see Case 1) and most of the arteriovenous malformations had evidence also of an intracerebral clot. Cases classified as vascular plaques and thrombi had either complete obstruction or pronounced localized narrowing of the lumen (see Case 2), which was considered the cause of the symptoms. Plaques noted incidentally were recorded as negative. Of our technically unsatisfactory group, three had carotid sheath extravasations and associated arterial spasm (and were subsequently evaluated by other means). The fourth patient developed marked nausea and vomiting and refused further study. Of the "negative" group, three were demonstrated to have significant lesions by ventriculography.

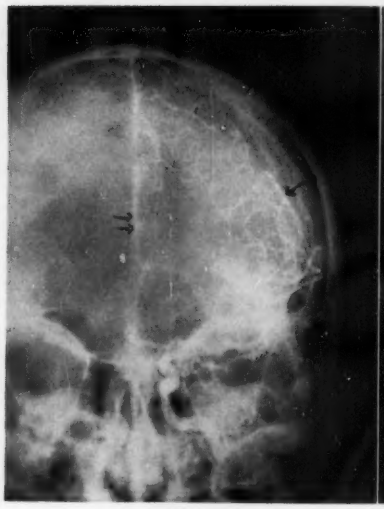

Fig. 1

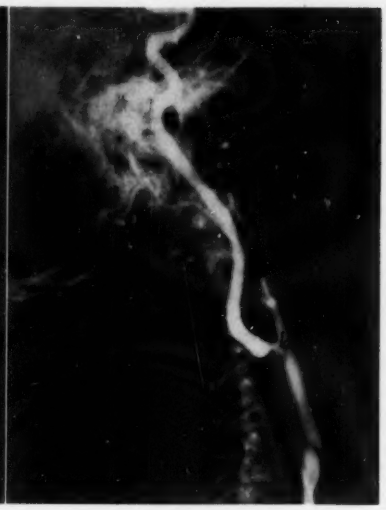

Fig. 2

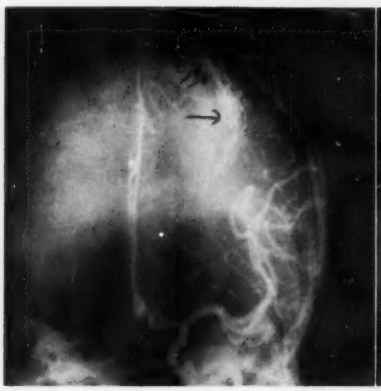

Fig. 3

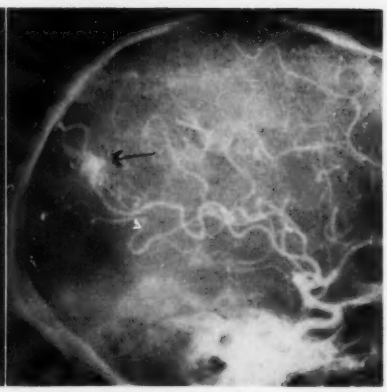

Fig. 4

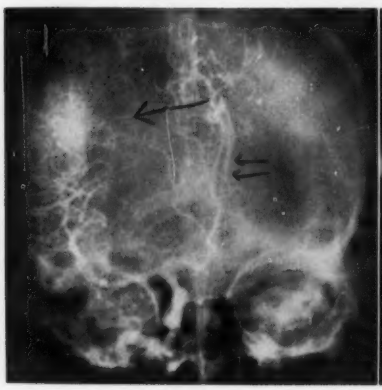

Fig. 5

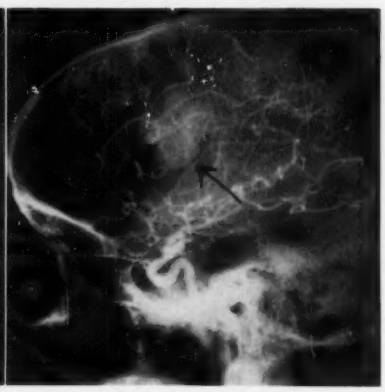

Fig. 6

Fig. 7

Fig. 8

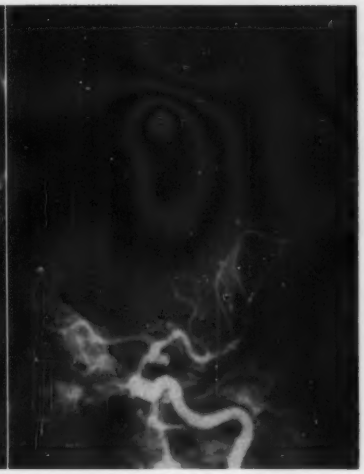

Fig. 9

*Case 1.*—A man, aged fifty-seven, was seen ten weeks following an automobile accident in which he had suffered a laceration of the forehead and a concussion. He was discharged from another hospital after forty-eight hours observation and was well except for intermittent headaches. The headaches became severe two days before admission, and he became increasingly somnolent. The optic discs showed questionable papilledema, and neurological examination was otherwise negative. Lumbar puncture produced clear, colorless normal fluid, and skull radiographs showed no abnormalities.

Left carotid arteriography demonstrated separation of the branches of the middle cerebral artery overlying the lateral aspect of the cortex from the internal table of the skull (single arrow, Fig. 1). This identified the position and suggested the size of the chronic *left* subdural hematoma. The lack of displacement of the anterior cerebral artery to the right (double arrows, Fig. 1) was considered adequate evidence of a corresponding *right* subdural hematoma. Both hematomas were evacuated at surgery.

*Case 2.*—A woman, aged sixty-three, suffered an attack of "dizziness" and right-sided weakness which cleared spontaneously in a few hours. Three days later, she veered to the left while climbing stairs and "couldn't make the right foot go." Examination revealed only mild right hemiparesis with slight exaggeration of the deep tendon reflexes on this side. Our impression was left carotid artery insufficiency.

A left carotid arteriogram demonstrated marked narrowing of the internal carotid at its origin by a well-developed plaque (Fig. 2). Following this, the minimal findings cleared completely, to be followed six weeks later by headache, "left eye out of focus," left retro-orbital pain, nausea and vomiting. Physical examination again indicated the patient to be entirely normal, but she was scheduled for thromboendarterectomy the next morning. She suffered complete occlusion with right hemiplegia during the night. This was unrelieved by surgery.

*Case 3.*—A woman, aged forty-eight, had a convulsion and became unconscious as a dentist was injecting procaine. She was examined by a physician who ruled out an anaphylactic reaction and referred her to us in coma, with a right hemiparesis and a left pupil which was smaller than the right. Lumbar puncture revealed grossly bloody fluid with a pressure of 200 mm. of water.

A left carotid arteriogram showed an arteriovenous malformation arising at the terminal end of the posterior parietal artery (single arrow, Figs. 3 and 4) draining into the superior saggital sinus (double arrows, Fig. 3). The decreased peripheral resistance is manifested by the dilatation of the "feeder" artery and the fact that it is filled so peripherally while the remainder of the vessels are in mid-arterial phase. These physiologic changes explain our "luck" in demonstrating such a peripheral lesion without the special timing available with a film changer.

At surgery, an adjacent intracerebral clot was evacuated and the vessels clipped. A postoperative angiogram showed marked decrease in blood flow through a very much smaller malformation.

*Case 4.*—A woman, aged fifty-four, had had left sided headaches and seizures for three years, when first seen, with occasional loss of consciousness. She described numbness of the left side of the face associated with some twitching, a "far-off feeling" and an associated odor of hot metals when none were present. For six months, the left arm had been quite weak and she was beginning to have increasingly severe headaches. Electroencephalography revealed a focal lesion in the right posterior frontal area. Physical examination gave entirely negative findings.

A right carotid arteriogram revealed a "tumor stain" which lasted well into the venous phase (single arrow, Figs. 5 and 6). The anterior cerebral was shifted to the left (double arrow, Fig. 5) and the middle cerebral group depressed (Fig. 6). The diagnosis of angioblastic meningioma was confirmed at surgery.

*Case 5.*—A woman, aged sixty-seven, developed sudden, almost complete ptosis of the left eyelid associated with some blurring of vision. She consulted her ophthalmologist who

found ptosis of the left lid associated with a large pupil which responded sluggishly to light and referred her to us with the diagnosis of "aneurysm in the Circle of Willis."

The left carotid arteriogram revealed an aneurysm arising from the internal carotid near the origin of the posterior communicating artery (single arrow, Figs. 7, 8 and 9). The oblique view (Fig. 9) was obtained, as aneurysms are commonly poorly demonstrated on one of the conventional views (Fig. 7, in this case). It is probably sound practice to include this view and to map the opposite side, as well, in these patients prior to surgery, as the defects are frequently multiple and bilateral.

### Summary

We have reviewed our experience with 233 carotid arteriograms in 181 patients seen in the past four years. The studies were performed in two 180-bed community hospitals with conventional multipurpose equipment. The absence of a rapid film changer has not proved critical in a single case.

## How to Save Lives on Michigan's Highways

*(Summary of remarks of John R. Rodger, M.D., Michigan Health Conference, Flint, May 25, 1961)*

### The Problem

There were 1,600 traffic deaths in Michigan in 1960, which is an increase of 125 over the previous year. Approximately three times this number were permanently disabled. Half of the deaths were in the age group of 25 to 65, but two-thirds of drivers involved in fatal accidents were in this same age group.

### Partial Solutions

1. Install seat belts on all cars, new and old. This would save an estimated 5,000 lives in the United States, and 200 in Michigan. It has been scientifically proven that the wearing of a seat belt reduces the chance of serious injury or death by at least 35 per cent. The 1962 cars will have seat belt attachments as standard equipment. The Governor has recently ordered seat belt installations on state-owned cars on a voluntary basis.

2. Purchase new cars with other safety features in mind, i.e., padded dash, avoidance of sharp objects on the instrument panel, two-door models where there are small children or else safety catches on four-door models, avoidance of colors hard to see on the highway or in snow, et cetera.

3. Avoid "wool-gathering" at the wheel. 85 per cent of accidents occur to drivers who have never had a serious accident before. If all accident repeaters were removed from the highways, total accidents would decline by less than 4 per cent.

4. Be in the best possible physical condition when you drive. Do not drive if you are having dizzy or black-out spells, if your vision is poor, if you are taking drugs which cause drowsiness, or if you are overly tired.

5. Do not mix alcohol and gasoline; 50 per cent of our serious accidents involve drinking to some degree, and as little as two cocktails or two beers can be dangerous. The unnecessary deaths and injuries from drinking and driving will continue until we become stricter with ourselves and support stricter enforcement measures.

6. We are "our brother's keeper" on the highway, too.

## Wisconsin Requires Auto Seat Belts

A long campaign by the State Medical Society of Wisconsin reached a successful conclusion recently when Governor Gaylord Nelson signed a law making front seat safety belts mandatory equipment on all new cars sold in the state.

The society had advocated such a law for the past several sessions of the legislature and had met with partial success one year when the legislators approved a resolution urging that all state vehicles be equipped with the belts.

Passage of the law makes Wisconsin the first state to require safety belts as part of a car's equipment. The law applies to all new cars, beginning with the 1962 models.

# Calhoun County Medical Society

**Wilfrid Haughey, M.D.**
**Battle Creek, Michigan**

THE CALHOUN County Medical Society was organized on November 11, 1839, in the village of Marshall. A Constitution and By-laws were adopted and the following officers elected:

President.....Luther W. Hart, M.D., Marshall
Vice-President.....D. B. Crane, M.D., Albion
Secretary.....J. H. Montgomery, M.D., Marshall
Treasurer.....W. Thompson, M.D., Marshall
Censors.....Drs. Crane, Montgomery, Devitt, Sibley and Greaves

The membership included A. L. Hayes, M.D., Marshall, first physician in the county, who came in 1831.

The first Calhoun County Medical Society accepted members up to 1854, and one in 1863; the roster contained names of seventeen doctors from Marshall, which was the most prominent area, four from Albion, three from Homer, and one each from Marengo, Teconsha, Burlington and Bedford. Battle Creek, which came into prominence later, had twelve members.

The first Calhoun County Medical Society went the way of many other medical societies. It disappeared before or during the Civil War. Although the old records are not now available, the present Calhoun County Medical Society is the second one organized, just as the present Michigan State Medical Society is the third formally organized group.

On November 17, 1876, a letter was sent to all the physicians of the Calhoun County area, calling a meeting to reorganize the Calhoun County Medical Society. It was signed by John P. Stoddard, M.D., Amos Crosby, M.D., and J. H. Montgomery, M.D. On December 4, 1876, a large number of physicians attended, and an organization was established with J. H. Montgomery, M.D., Marshall, President; Edward Cox, M.D., Battle Creek, First Vice President; O. S. Phelps, M.D., Homer, Second Vice President; John P. Stoddard, M.D., Albion, Secretary; M. A. Garcia, M.D., Battle Creek, Treasurer. Standing committees were appointed on "Ethics and Grievances," "Public Health and Hygiene," "Epidemics and Endemics," "Relations with Jurisprudence." Diphtheria was selected as the subject for discussion at the next meeting. The initiation fee was fixed at $1, and the annual tax or dues at 50 cents.

The charter members were J. H. Montgomery, M.D., Marshall; Edward Cox, M.D., Battle Creek; Mark W. Tomlinson, M.D., Battle Creek; Amos Crosby, M.D., Albion; John P. Stoddard, M.D., Albion; O. S. Phelps, M.D., Homer; L. A. Foote, M.D., Vermontville; J. H. Smiley, M.D., Marshall; J. B. Davis, M.D., S. S. French, M.D., and M. A. Garcia, M.D., Battle Creek; O. C. Lyon, M.D., Teconsha; E. C. Collins, M.D., and H. L. Joy, M.D., Marshall. Of these, Dr. J. H. Montgomery was a charter member of the first Calhoun County Medical Society organized in 1839 some thirty-seven years before, also Drs. Cox, Tomlinson, Foote, French, Crosby, Stoddard and Joy.

In 1870, a minute book was established which has been in the possession of various persons during the years. It contains discussions and reports, admissions of new members, many of the arguments and some most interesting papers on topics of the day such as public health, infectious diseases, and included disciplinary measures. That book is now in safe keeping at the Willard Library in Battle Creek. It was maintained until the reorganization of the Calhoun County and the Michigan State Medical Societies in 1902, the period in which most of the medical societies reorganized into more or less modern form. Calhoun County was so prepared that it obtained Charter Number 1 from the reorganized Michigan State Medical Society, Charter Number 2 going to Wayne County.

### Health City

Very early, Battle Creek became known as the Health City. An institution had been started on Main Street, known as the "Health Reform Institute," in

1866. About 1874, Dr. John Harvey Kellogg came to Battle Creek as its director. He immediately became interested in all sorts of health items to improve the condition of his patients and patrons. He introduced baths, massage, exercises, bicycle riding and swimming. He gradually developed his Institute into the original Battle Creek Sanitarium, building new and elaborate structures.

At an early stage in his career, he became convinced that meats were not healthful, began devising substitutes, and established a factory to produce his various items. He was against coffee and tobacco, and he became the spark plug of a great industry which developed in Battle Creek, manufacturing the Battle Creek Sanitarium special vegetarian foods. Dr. Kellogg stimulated the establishment of a completely new industry in "prepared foods."

C. W. Post, who was a patient at Dr. Kellogg's institution, studied his plans and programs. Soon afterward, he began experimenting on a substitute for coffee and a substitute for breakfast foods, making them more palatable and acceptable. He established Postum Cereal and the Postum Company which grew into General Foods, whose main manufacturing plant is in Battle Creek. Later, Dr. Kellogg's brother, William K. Kellogg, worked in his sanitarium and manufacturing establishment, helping with food preparations and inventions. He also branched out for himself in the breakfast food field and established on a very small scale, at first, the great Kellogg Company whose headquarters plant is in Battle Creek, with branch plants scattered throughout the world. Breakfast food and food companies became very popular and, during the years, it was reported that there had been in Battle Creek 280 various food companies, including several which Dr. Kellogg had established. There are four mammonth plants in Battle Creek now: General Foods, the Kellogg Company, the Ralston Purina Company and the Battle Creek Food Company, the latter developing and manufacturing the various foods which Dr. Kellogg promoted, including substitutes for meat and coffee.

The Sanitarium itself grew into a world-wide institution, with a capacity for 2,000 patients and thirty physicians. According to a report in the first forty-four years of operation the Sanitarium had 143,643 patients, of which 26,245 were surgical.

## Special Hospitals

During the years, special hospitals have been established at various places in the world which added to reputation, prosperity, and the facilities to care for patients. Battle Creek has been unusually fortunate in this regard. First came the Battle Creek Sanitarium, still operating in reduced form as the Battle Creek Health Center. In the late 1890's, Dr. O. S. Phelps returned to Battle Creek and established the "Phelps Sanatorium" in competition with Dr. Kellogg's Sanitarium. A five-story, solid fieldstone masonry building was constructed and operated for a while, but without the anticipated success. Dr. Phelps was competing with the master salesmanship and showmanship of Dr. Kellogg, and also the very unique, full vegetarian diet plus world fame.

Immediately after the First World War, it became necessary to provide hospital services for thousands of World War veterans. The American Legion Hospital was established, using the Camp Custer Recreation Center just outside of Battle Creek. It was a wooden structure, using small buildings from Camp Custer for extension from 120 to 450 beds. That hospital operated for many years, receiving tuberculous veterans, and later took tuberculosis cases from the metropolitan areas in Detroit. Patients increased to several hundreds, all in a single-story structure with corridors connecting. General Foch, Supreme Commander of the Military Forces in the First World War, and General Pershing, came to dedicate that hospital as the "American Legion Hospital."

A little later, Veterans Administration Hospital Number 100 was developed on new grounds which were a part of the Fort Custer site, a modern, up-to-date construction, with a capacity now of around 2,000 neurologic cases. That institution is still going strong.

At the very start of the Second World War, the Army bought and took over the Battle Creek Sanitarium main buildings which had just added a fifteen-story luxury annex. The private rooms were cleared out, wards built, and Percy Jones Hospital became a matter of fact. This was the headquarters for amputees of all types during the war. Wheel chairs were common, and the city built ramps at the curbs which these patients frequented. Percy Jones was closed after the war, then reopened during the Korean war, continued for some time until it was closed again.

The Battle Creek area is a site for still another hospital. During the First World War, an extension was built at Camp Custer, the Camp Hospital, in the northwest section of the area which became Fort Custer in the Second World War. Michigan had accumulated many hundreds of people whom the courts had ordered sent into institutions, but there was no place for them. The suggestion was finally

made that this camp hospital might be used. The abandoned hospital was rejuvenated and made inhabitable for the delinquent children who are housed there now.

Another hospital in Battle Creek was Nichols Memorial Hospital. This started out as a small "union home" in 1889. It had various locations until Mr. John Nichols decided to establish a modern hospital. He purchased an old residence, remodeled it, consolidated it with the union home and changed the name. The hospital underwent various changes, regulations, handicaps, and ultimately developed into a 100-bed hospital. It developed a training school for nurses where the girls spent three years, donated their time mostly, and were taught by various members of the staff. Nichols Memorial Hospital, renamed the Community Hospital, later moved to new quarters in a new location. The Battle Creek Community Hospital is operating on the fifth floor, one of the most modern and complete intensive care units.

Mrs. Leila Y. Post Montgomery, widow of C. W. Post, founder of Postum Company and General Foods, chose the Sisters of Mercy to operate, and built a very modern 100-bed hospital which was opened in 1927. A few years later, when pressured for room, she built an addition of around sixty beds. Soon after opening, Leila Hospital established a nurses training course with ten students in 1928 and forty-nine students in 1929. There was a director of nurses with a superintendent directing the training. The doctors on the staff were the lecturers and the instructors. For many years, the hospital has been cooperating with Mercy College in Detroit. The hospital is now undergoing modernization to include a complete new unit for laundry and other facilities and an extension of the surgical equipment to include special care.

## Nursing

For many years, hospitals have been used as training schools for nurses, and most larger hospitals went through that process. The old Nichols Hospital, now Community Hospital, had a training school for nurses for a number of years. This school graduated its first class in the late 1890's and was one of the first training schools. The Battle Creek Sanitarium also conducted such a school for a great many years. The training became more complicated, the registered nurse program more prominent, and many of these nursing schools became attached to University Medical Centers; the others gradually disappeared. The Mercy Sisters established a college in Detroit to care for their nurses, many years before the Battle Creek Sanitarium had done the same thing. There had been a Battle Creek College for years but it moved away, and Dr. Kellogg consolidated his Nursing School and his School of Physical Education into another Battle Creek College, establishing the necessary literary and scientific courses. The college continued for quite a number of years but closed when the Sanitarium itself suffered financial difficulties just before the Second World War. Several years ago, a proposal was made to establish schools for practical nurses and nurses' assistants. The Battle Creek Public Schools have had such a course, proceeding successfully for the past ten years or so.

In all this activity, Battle Creek doctors have been very active in other areas, such as scientific advancement. The research work and training developed at the Battle Creek Sanitarium under Paul Roth, M.D., developed a program, tests and use, pioneering the establishment of basal metabolism. Many of the programs of physical medicine developed at this institution are now being used throughout the world.

## State Society Officers

The Calhoun County Medical Society has always had members who attained more than local prominence. In 1879, Edward Cox, M.D., was President of the Michigan State Medical Society, followed in 1888 by S. S. French, M.D., and in 1899 by A. W. Alvoord, M.D., who was also on the State Board of Registration in Medicine. Then there was a long skip until 1930 when Ray C. Stone, M.D., was elected President; in 1949, Wilfrid Haughey, M.D., was named President-for-a-Day, and in 1957, George W. Slagle, M.D., served a term as President. Five of these men served a term and one received the honor. W. H. Haughey, Sr., M.D., served as Delegate, Councillor and as Secretary of The Council for ten years. In 1910, Wilfrid Haughey, M.D., became Secretary and Editor, the two jobs being combined at that time. He served three years and then returned as Editor in 1942.

## Blue Shield

The Calhoun County Medical Society can also claim pioneering work in developing Blue Shield and also Blue Cross. Several committees were working about 1931, meeting frequently to consider what a pre-paid health program should contain and should provide. In 1934, members were ready to put a plan in operation, but were prevented by AMA discouragement. In 1936-1937, they were again ready but were prevented on the basis of conflicting with the insurance laws.

Further study was continued by the Council of the State Medical Society with the addition of workers from Washtenaw and Wayne Counties, and Michigan Medical Service was developed very much on the outline which Calhoun County had previously presented.

Drs. R. C. Winslow, Joseph Rosenfeld, Harry Becker, Harvey Hansen and Wilfrid Haughey constituted the various committees that worked during the years and ultimately developed a program. (For details, see a report published in THE JOURNAL of the Michigan State Medical Society, "With Firm and Regular Step," pages 632-661, June, 1951.) Michigan Blue Shield started out as a "wild dream" of a small group, who believed some type of prepaid plan could be developed in spite of AMA opposition, and insurance experts' claims that this was "uninsurable." The plan started with $10,000 borrowed from the Michigan State Medical Society, and it is now paying out $7,500,000 a month; $82,000,000 in the current year. Calhoun County is and should be justly proud of its many ventures and accomplishments.

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## *Heart Disease Cure Still Complex*

Heart disease is as old as Adam, but finding a cure is dishearteningly complex, a University of Michigan medical expert believes.

Charles J. Tupper, M.D., assistant dean of the University of Michigan Medical School and associate professor of internal medicine, says the human heart works in a way that expresses Nature's menace, marvel, mystery, all in one:

The American heart is considerably more susceptible than the Japanese heart, for example. National death rates caused by heart disorders: United States—705; Japan—90 (per 100,000).

Heart disease is America's greatest killer of man; more than half a million Americans die of it every year.

Physically, the heart muscle contracts and relaxes alternately and continuously, pumping the blood steadily through the lungs and body. Inside the cells of heart muscle tissue, certain chemical changes go on which give the heart the energy to work. Finally, electrical impulses trigger and stimulate the rhythmic contraction and relaxation of the heart.

One of the most important chapters of the heart research story is the study of these electrical impulses, Dr. Tupper says. Since the turn of the century, a crude method of measuring the electrical stimulus to the heart beat has been developed into today's electrocardiogram. It determines specific cause of some types of heart disease. The most recent great innovator of the electrocardiogram is the late Frank N. Wilson, M.D., former University of Michigan professor of internal medicine. Today, it is one of the most important weapons used in the war against heart disease.

Actually, there are more than 20 well-defined types of heart disease. But the most serious types fall into two large classifications:

About 10 per cent of all heart disease, common among children, is caused by the leakage or obstruction of the heart's valves which prevents the normal passage of blood. The exact cause is not known, but it is associated with rheumatic fever and follows streptococcus infection of the throat. The best cure is prevention and prompt treatment of the infection.

Most of the remaining 90 per cent is made up of diseases affecting arterial flow of blood to body tissues and to the heart's own "feeding-system." It is most common among adults between the ages of 30 and 60 years.

The tiny arteries that feed the tissues throughout the body become narrower and less elastic. Then the pressure rises because the heart has to pump harder to force blood through the small arteries. Although the exact cause is far from completely understood, tension, stress, anxiety, and diet may be responsible. At the moment, the best shield against this menace may be preventive education, University of Michigan doctors suggest.

"The answer to the menace of heart disease will one day be found by medical science. The work will be accomplished, as always, by 'the seekers'—that army of stubborn and skillful researchers who play the 'waiting game' with death," Dr. Tupper concludes.

# Thrombotest—A New Method for the Control Of Oral Anticoagulant Medication

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Battle Creek, Michigan

THE INCREASING use of oral anticoagulants in recent years for myocardial infarction and other thrombo-embolic conditions has intensified the search for a more reliable method than the time-honored Quick's prothrombin time to guide the medication. The risk of bleeding still keeps many clinicians from using oral anticoagulants on a long-term basis after coronary occlusion.

In the search for more dependable control of anticoagulant medication, a number of new methods have been developed, but some of them are too time-consuming and are mainly used in research. The so-called P&P method, developed by P. A. Owren, has been in use for the control of anticoagulant medication in the Scandinavian countries for the past ten years, and has been shown to be superior to Quick's method.[1,2] Recently, however, Owren has developed a new method for the control of anticoagulant medication, called the Thrombotest. This test seems to be superior to any presently used method, both because of its simplicity and its physiological approach to the coagulation mechanism involved during anticoagulant medication.

Before going any further in discussing this method, I would like to summarize briefly the present concept of the coagulation of the blood and the factors involved. There are presently twelve known factors involved in the coagulation process (Table I). Thrombin is the key substance in the coagulation process. It is not normally present in the circulating blood. It is derived from the inactive plasma precursor prothrombin. Prothrombin is converted to thrombin by a principle which probably is an enzyme, prothrombinase. Once prothrombinase is formed, the blood clots in a few seconds.

There are reasons to believe that prothrombinase may be developed in two different, partly independent, ways which are often referred to as the intrinsic and extrinsic blood clotting systems. Figure 1 and Figure 2 illustrate this concept. The extrinsic system needs the presence of one clotting factor not found in the circulating blood, namely — tissue thromboplastin; hence, the term extrinsic.

The following factors are known to take part in the formation of extrinsic prothrombinase: tissue thromboplastin, proconvertin, calcium ions, proaccelerin and Stuart-Prower factor.

TABLE I. NUMBER OF CLOTTING FACTORS WITH MOST FREQUENTLY USED SYNONYMOUS DESIGNATIONS

| *Factor Number* | *Synonyms* |
|---|---|
| Factor I | Fibrinogen |
| Factor II | Prothrombin |
| Factor III | Tissue thromboplastin |
| Factor IV | Calcium |
| Factor V | Proaccelerin |
| | Labile factor |
| (Factor VI) | (Accelerin) |
| Factor VII | Proconvertin |
| | Stable factor |
| Factor VIII | Antihemophilic A factor |
| | Antihemophilic factor (AHF) |
| | Antihemophilic globulin (AHG) |
| Factor IX | Antihemophilic B factor |
| | Plasma thromboplastin component (PTC) |
| | Christmas factor |
| Factor X | Stuart-Prower factor |
| | Stuart factor |
| Factor ? (not numbered) | Antihemophilic C factor |
| | Plasma thromboplastin antecedent (PTA) |
| Factor ? (not numbered) | Hageman factor |

In the formation of intrinsic prothrombinase, the following factors take part: Hageman factor, antihemophiliac factors A, B and C, calcium ions, Stuart-Prower factor, proaccelerin, and a lipid-containing factor in the blood platelets.

The two coagulation systems seem to differ in importance in physiological hemostasis. Patients with different forms of bleeding tendencies will illustrate this. Hemophiliacs, whose intrinsic clotting system is very defective, but whose extrinsic system is normal, have a severe bleeding tendency. Patients with congenital proconvertin deficiency, however, have usually a mild hemorrhagic diathesis, with little tendency to spontaneous hemorrhages. However, they often bleed freely after surgery, trauma, tooth extraction, et cetera. In these patients, the extrinsic system is impaired, whereas the intrinsic system is normal.

We shall now turn back to the methods used for determination of oral anticoagulants (dicumarol and phenylindandione derivatives). These anticoagulants cause a reduction of antihemophilic B factor of the intrinsic system, proconvertin of the extrinsic system, and prothrombin and Stuart-Prower factor which take part in both systems.

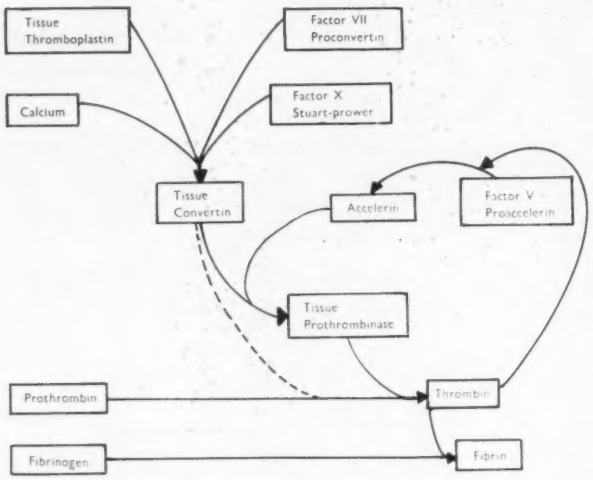


Fig. 1. Clotting theory of Owren: extrinsic system. The possible influence of contact and other factors on proconvertin has been disregarded.

Owren's P&P method was designed to measure the deficiency of prothrombin and proconvertin, which were thought to be the two main clotting factors affected by anticoagulant medication. Quick's prothrombin time method has complete absence of sensitivity to variations in antihemophilic B factor, and the P&P method is only slightly sensitive to variations in this factor (Fig. 3). The sensitivity to proconvertin is also minimal with Quick's method, but normal with the P&P method (Fig. 4). Thus, it is evident that both these methods are inadequate in the control of anticoagulant medication where these factors are involved.

Thrombotest was developed with the purpose of a balanced measurement of all the factors involved during oral anticoagulant medication. The method is sensitive to all the factors involved both in the intrinsic and extrinsic system. The intrinsic system, which acts slower than the extrinsic system, has been accelerated through the introduction of an active cephalin preparation, while the extrinsic system has been retarded through the introduction of thromboplastin with low activity.

For simplicity, an "all-in-one-reagent" has been devised, which contains the cephalin, the thromboplastin, calcium and a substrate-plasma with a high content of all clotting factors not influenced by the anticoagulant treatment. The plasma has been freed of the four factors to be determined. When the patient's blood or plasma is added to the reagent, the clotting time will depend only on the concentration of these four factors in the blood.

The reagent is lyophilized and kept in vacuum-sealed ampoules. It is reconstituted with distilled water for the testing of capillary blood, and a 3.2 mM calcium chloride solution for testing of citrated blood or plasma.

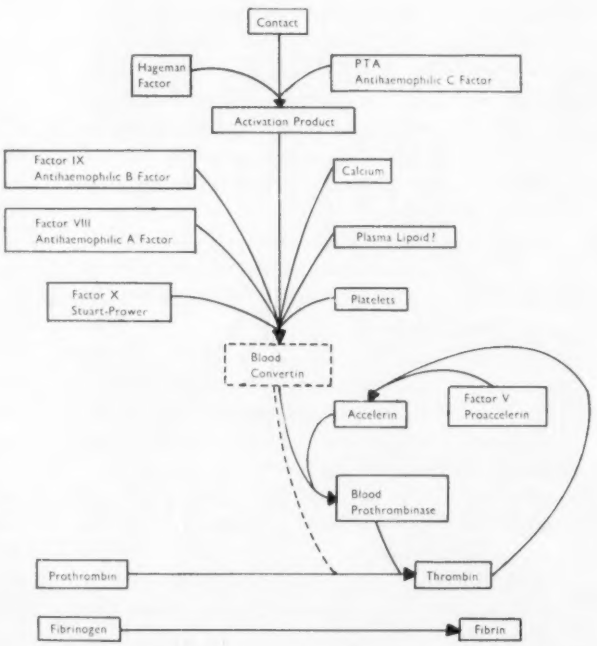


Fig. 2. Clotting theory of Owren: instrinsic system.

*Capillary Method.*—0.5 ml of the reconstituted reagent is measured into a small test tube, leaving it in a water bath at 37° C. for not less than 3 minutes to reach the correct temperature, but not more than

30 minutes. Capillary blood 0.10 ml is then added and the coagulation time measured. The coagulation time is converted to coagulation activity, expressed in percentage of the normal, with the aid of a correlation curve. (Standard curves are made for each bath and supplied together with the dried reagent. Normal controls are unnecessary).

*Venous Blood Method.*—Nine volumes of blood are mixed with one volume of 3.13 per cent (W/v) sodium citrate dihydrate. The lyophilized reagent is dissolved in the calcium chloride solution according to instructions. Otherwise, the procedure is identical with the capillary method.

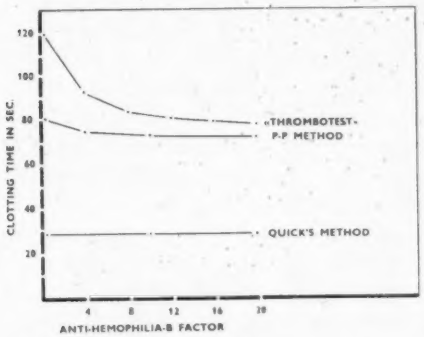


Fig. 3. Sensitivity to Factor IX (PTC, Christmas factor, antihemophilia B factor). Plasma from a patient with hemophilia B was mixed with normal plasma in various proportions. The mixtures were assayed in three test systems after dilution 1 + 4 with adsorbed human plasma in order to imitate conditions during anticoagulant therapy. (Conc. of prothrombin, Factor VII (Proconvertin) and Stuart-Prower factor about 20 per cent in all samples tested). (After Owren).

*Plasma Method.*—Citrated blood is centrifuged, and a measured volume of plasma is diluted with normal saline in the proportion 3 plus 2. The plasma and reagent is then utilized as with the previous methods.

Owren recommends plastic or siliconized tubes for the collection of the blood in the last two methods. If the blood is stored in a glass tube, activation processes will start with shortening of the coagulation time. This phenomenon is seen both with Quick's method, the P&P method, and the Thrombotest method. However, if the test is done within an hour after the blood is drawn, the influence of glass tubes is negligible in patients on oral anticoagulants.

The so-called therapeutic range for anticoagulant therapy as controlled by this method is considered to be 10 to 25 per cent of normal, which also is the range recommended by many clinicians using Quick's method.

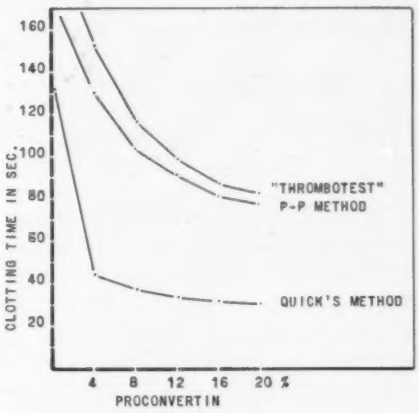


Fig. 4. Sensitivity to Factor VII (Proconvertin). Plasma from a patient with congenital deficiency of Factor VII was mixed with normal plasma in various proportions. (After Owren).

The normal clotting time with Thrombotest is about 36 to 40 seconds, slightly higher with venous blood than capillary blood. Clotting time for blood samples during anticoagulant therapy in the therapeutic range of 25 to 10 per cent vary from about 70 seconds to 160 seconds. A technical error of a few seconds in reading will not cause a large deviation in the calculated percentage activity (Fig. 5). This is in contrast to Quick's method, where a few seconds' difference in reading makes a marked difference in percentage activity.

*Own Material.*—The Thrombotest method using venous blood was tried in seventy-two patients at Battle Creek Community Hospital and in the author's office laboratory. Almost all these patients were on anticoagulant medication, mainly dicumarol or warfarin. The method of venous blood was chosen because most of the patients were in bed and the blood had to be collected on the ward and brought to the laboratory. This excluded the use of the capillary method. In all patients, Quick's prothrombin time determination was also performed for comparison. The results of both methods are plotted on the graph (Fig. 6). Both Quick's method and the Thrombotest were performed by the same laboratory technician at the hospital, where most of the determinations were done. Considering that the technicians were un-

familiar with the Thrombotest method, there is fairly good correlation with Quick's method.

The Thrombotest capillary method was tried in a few patients concurrent with the venous blood method

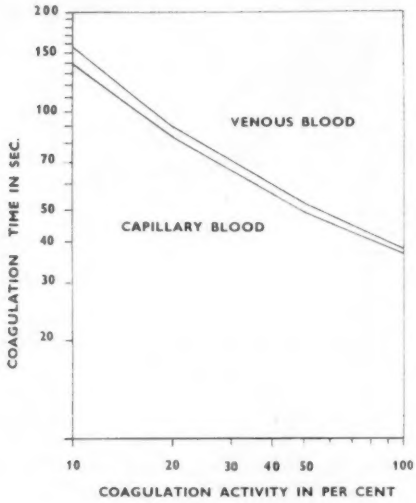


Fig. 5. Correlation curve for converting clotting-times to coagulation activity in percentage of normal. A similar curve is included in every package of Thrombotest material.

and Quick's method and gave quite equivalent results. Tests with the capillary method were too few, however, to warrant any conclusions. This method seems to be very practical in larger outpatient clinics for anticoagulant medications, as only a drop of blood is needed and the result is available in a couple of minutes.

As pointed out by Owren[3] several sources of error have to be watched. When using the capillary method, the first drop of blood should be taken for testing; later drops will give accelerated clotting. A free flow of blood is also important, as pressure or squeezing of the skin to produce enough blood shortens the coagulation time.

## Summary

Thrombotest is a method for control of anticoagulant therapy which seems to be superior to present available methods, both in dependability and simplicity. It takes into account all four blood-clotting factors affected by oral anticoagulants (antihemophilic B factor, proconvertin, prothrombin and Stuart-Prower factor).

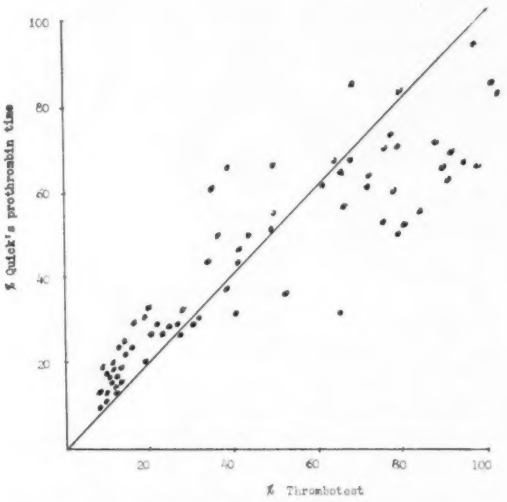


Fig. 6. Coagulation activity in 70 patients. The per cent activity for both the Thrombotest method and Quick's method is plotted for each patient.

The test can be performed on capillary blood or on citrated venous blood or plasma. The capillary method seems to be ideal for outpatient use, as the result is available immediately. The test which presently is being used to a great extent in Scandinavia deserves to be tested in the larger medical centers in the United States.

## Acknowledgment

I wish to thank the Pathology Department at Community Hospital for making facilities available for this study, and Miss Ruth Fretz for her valuable assistance.

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# Unusual Aspects of Anaphylactoid Purpura In Childhood

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IT IS not the purpose of this paper to review in detail the subject of anaphylactoid purpura ("Schönlein-Henoch syndrome"). Such a review has been adequately presented by Allen, Diamond, and Howell.[1] We are interested rather in calling attention to some of the more serious manifestations and complications of this most interesting disease.

The precise etiology remains uncertain. That it may represent a hypersensitivity reaction has been generally accepted. Such agents as preceding infections, foods, drugs, and environmental chemicals have been implicated as at least being aggravating factors.[2] Freud et al[3] described a case in which the patient developed anaphylactoid purpura and renal failure following vaccination against smallpox. The symptoms and findings are varied. A purpuric rash appearing mostly over bony prominences is essential for the diagnosis, but it may not be evident until after more serious manifestations have appeared, complicating the diagnostic and therapeutic management as will be illustrated in the cases presented herewith. Other symptoms and signs include periarticular swelling, fever, soft tissue edema, bleeding from mucous membranes and, even more distressing, gastro-intestinal disturbances with or without bleeding and renal involvement ranging from transient hematuria to marked impairment of renal function leading to death. Allen et al,[1] in their review referred to above, reported two patients who developed neurologic symptoms with convulsions associated with hypertension, and Lewis and Philpott[3] described three cases, in one of which there were no signs of renal disease.

The pathology of the lesions of anaphylactoid purpura has been described by Kreidberg and associates[4] as consisting of acute perivasculitis in the walls of small vessels. Vernier,[5] by use of skin and kidney biopsy, has found fibrinoid thrombi in capillaries and an associated endothelial perivascular reaction. The renal studies suggested a focal glomerulonephritis as the characteristic lesion.

The gastro-intestinal manifestations may be the most distressing from an emergency life-threatening point of view. Wolfsohn[6] collected nineteen cases from the literature on the complication of intussusseption and added one of his own. Allen[1] reported on four and Steinharst and Jonas[7] described yet another case. To these, we are adding one as will be noted later. Exsanguinating hemorrhage, obstruction, and perforation of the bowel[8] are other serious complications of abdominal purpura.

Treatment of these grave aspects depends on the merits of each case. Those showing intussusseption or other forms of intestinal obstruction usually need surgical intervention as well as supportive therapy, such as blood transfusions. Exsanguinating hemorrhage must be treated for shock and the blood loss. The question of the place of steroids in the treatment of this condition has not been fully settled. However, the observations of Allen and colleagues[1] warrant serious consideration. They stated, "When the diagnosis of Schönlein-Henoch's purpura of gastro-intestinal involvement is made, we believe that immediate steroid therapy is indicated in an effort to reduce the edematous hemorrhagic areas in the bowel wall and thus possibly prevent the secondary complications of intussusseption and massive hemorrhage. This seems particularly true since none of our patients who received adequate steroid treatment of twelve hours or longer developed symptoms of intussusseption. We have found that symptomatic improvement in the abdominal pain is a fairly consistent and striking feature and gastro-intestinal hemorrhage, which may be quite massive and life-endangering, is also usually controllable with adequate steroid therapy." With renal involvement, the value of steroids is less certain. The disease has periods of remissions and exacerbations, and since many individuals do recover in spite of severe renal manifestations, it would be difficult to ascribe definite benefit to the use of steroids under such circumstances. For similar reasons it is difficult

to ascribe prognastic value to biopsy studies. Perhaps a long term follow-up will clarify this particular problem.

We shall now describe briefly four illustrative cases from our own experience with equally brief comments on each one.

*Case 1.*—K. R., a six-year-old white boy, suffered abdominal pain, which became progressively worse over a twenty-four-hour period. This was associated with vomiting on two occasions. The child had a low grade temperature, developed RLQ pain with guarding, had an elevated white count with shift to the left, culminating in an appendectomy. At operation, the appendix was perfectly normal. The following day, swelling developed in the left wrist and, subsequently, a migratory polyarthritis ensued involving wrists, elbows and ankles. Seventy-two hours following admission, the child developed a purpuric rash over the buttocks and lower extremities.

*Comment.*—This case serves to illustrate the multifacet symptomatology of allergic purpura, without definitive symptoms occurring until after abdominal surgery had already been carried out. It also serves to illustrate that this particular malady must be considered in the differential diagnosis of acute conditions of the abdomen.

*Case 2.*—R. K., a four-year-old white boy, developed a URI and otitis media which was treated with triple sulfa. One week later, the child developed a macular rash over the lower extremities and buttocks, which subsequently involved the upper extremities. The rash persisted for two weeks, at which time the child developed swelling of his joints. The rash then became purpuric in character, and the child developed microscopic hematuria. All hematological tests gave normal findings. The child was discharged and within one week displayed the typical findings of acute glomerulonephritis with gross hematuria.

*Comment.*—This case illustrates the probable etiological role of sulfa, the rather extended history of rash prior to joint swelling. It also reveals the usual microscopic hematuria and the not infrequent occurrence of acute glomerulonephritis.

*Case 3.*—T. M., a child of eight years, had a history of vomiting and abdominal cramps for forty-eight hours. Shortly thereafter this white boy developed swelling of the ankles and wrists and a purpuric rash involving the lower extremities. This was followed by the onset of black tarry stools, and admission to the hospital was instituted. On admission, the urinalysis revealed a 2+ albuminuria and microscopic hematuria. After admission, melena continued unabated, the child having six to seven grossly bloody stools, necessitating three whole blood transfusions to maintain the hemoglobin above 10 Gm. The child was also started on cortisone, and the rectal bleeding subsided in forty-eight hours. However, the microscopic hematuria was replaced by gross hematuria and all the findings consistent with acute glomerulonephritis. The urinalysis did not return to normal for a period of nine months.

*Comment.*—This is the case of a child with typical Schönlein-Henoch syndrome, who developed massive gastro-intestinal bleeding, which responded rapidly to steroids, and then proceeded to develop an acute glomerulonephritis.

*Case 4.*—P. R., a two-year-old white girl, developed acute abdominal pain four days following the onset of a purpuric rash of the lower and upper extremities associated with polyarthritis. The abdominal pain was severe and intermittent, and the patient vomited on two occasions. There was no rectal bleeding, but a mass was palpated in the left lower quadrant. A diagnosis of intussusception was made and confirmed with a barium enema. At operation, a bleeding Meckel's diverticulum was found, representing the head of the intussusceptum. The bowel was quite hemorrhagic, thus requiring a bowel resection with the removal of 4 feet of intestine. The child was also given blood and intravenous fluids to combat shock and anemia. The postoperative course was uneventful.

*Comment.*—This two-year-old child developed an acute intussusception with allergic purpura. This serves to remind one of this diagnosis and not to mistake severe abdominal pain as part and parcel of this malady.

## Summary

A review has been presented stressing the more unusual and endangering aspects of anaphylactoid purpura. Comments on management and illustrative cases have also been presented.

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# The Use of Oral Hypoglycemic Agents in the Control Of Diabetes Mellitus

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AT PRESENT, three oral agents for the control of hyperglycemia are available to the practicing physician: Tolbutamide (Orinase®) Chlorpropamide (Diabinese®) and Phenformin (DBI®).

Tolbutamide and chlorpropamide are sulfonylurea drugs and are indentical in their mechanism of action, differing in their rate of metabolism and rate of excretion. Phenformin is totally different; it is not a sulfonylurea and differs in its mechanism of action from the sulfonylurea compounds. The mechanism of action of phenformin is not fully known; much has been uncovered as to its role and its mode of action, namely that phenformin causes no changes in glucose tolerance or sensitivity to insulin. There is no change in urinary excretion of nitrogen, potassium, 17-hydroxycorticoids and 17-keto-steroids in diabetics. Phenformin does increase blood pyruvate and lactate levels during glucose tolerance tests. Thus, there is no reason to believe that inhibition of adrenal function, decreased gluconeogenesis from protein and increased insulin activity are the mechanisms of action. There may be some relation to pyruvate disposal, and this suggests that phenformin produces its hypoglycemic effect by causing an increase in anaerobic glycolysis as a result of suppression of cellular oxidation.[1] Clinical evidence does not support an anaerobic mechanism for the action of phenformin and a more recent hypothesis[2] suggests that at physiologic concentrations phenformin increases the oxidation of glucose in hepatic tissue and possibly adipose tissue via the hexose monophosphate shunt, but at present there is no single hypothesis explaining the hypoglycemic mechanism of action of phenformin.[2]

Pharmacologically, there is no determinable effect other than hypoglycemia. No organ toxicity has been reported in any patient to date,[3] and this includes hepatic, hematologic, renal, thyroid or cardiac. The side effects encountered in the use of phenformin are related to dosage, rate of increment of dosage. The side effects most frequently encountered include anorexia, headache, nausea, vomiting, diarrhea, drowsiness and vertigo.[4] The incidence of side reactions varies considerably with various reports. Initially, with the use of phenformin, attempts to achieve hypoglycemic response were approached with too much vigor, and this resulted in a greater incidence of gastrointestinal side reactions. The incidence of side effects can be greatly reduced or avoided by the judicious use of the drug, the rate at which the dosage is increased, and patient individualization. The dictum of "start low, go slow" is to be followed. The patients who do well and tolerate the drug with full therapeutic range will be started on a dosage not to exceed 50 milligrams per day. The rate of increment should not be less than three to four days, even a full week, and then only with 25 milligram increments. The time of administration is very important. Taking the dosage just prior to, with, or following the meal will result in abolishment or great reduction of the gastrointestinal side effects which are central rather than local in origin.[5]

The use of phenformin in early clinical trials met with a greater incidence of failure because the above principles were not followed. Phenformin is a very valuable drug in the control of diabetes mellitus and can be used alone or in combination with insulin or one of the sulfonylurea compounds. Phenformin is unique in that it can be used in all types of diabetes, and all types studied have responded to treatment with phenformin.[6] The drug phenformin is most effective in the stable-maturity onset, keto-acidosis resistant type of diabetic patient. The drug should be used with insulin in the labile, brittle type of diabetic patient and has no place in the treatment of diabetic coma.

The effectiveness of combined oral therapy of phenformin and sulfonylurea compounds in keto-acidosis resistant diabetes, in patients who have failed on sulfonylurea compounds alone, has been achieved in as high as 70 per cent and in 60 per cent of diabetics who were uncontrolled on phenformin alone.[7] Beaser achieved satisfactory lowering of blood sugar in nineteen out of twenty-five patients who failed to respond to the sulfonylurea compounds alone.[8] This

becomes of utmost importance because of the reported toxicity of sulfonylurea drugs, and the rate of 2 per cent secondary failures in any one month with use of tolbutamide.[9] Primary failures as well as secondary failures to the sulfonylurea drugs should be tried on this combination therapy.

There is no problem of hypoglycemic reaction with the use of phenformin alone.[10] The sulfonylurea drugs are practically impotent in total diabetes; that is, the growth onset or the severe adult labile, brittle diabetic patient. The use of phenformin on the other hand is of great value in the management in this type of case.[11] The reduction of the required insulin dosage and the avoidance of serious side effects of hypoglycemic reaction has been achieved in the labile diabetic patient with the use of combined therapy of insulin and phenformin. The breaking of insulin resistance has been achieved with dramatic results in some instances.[12-13]

White, in treating juvenile diabetic patients with the combination of insulin and phenformin, was able to reduce insulin dosage and avoid serious, severe hypoglycemic episodes and maintain adequate growth.[14] The use of phenformin and insulin affords the physician a tool to smooth the course of management in the labile diabetic patient and avoid the hazardous episodes of hypoglycemia.[15]

The current indications for phenformin can be broken down into classes.[8]

I. DBI.
Alone
Stable, maturity onset, keto-acidosis resistant diabetes.

II. DBI.
Alone or plus sulfonylureas
primary and secondary
Sulfonylurea failures.

III. DBI.
Usually with insulin.
Labile growth onset diabetes.

Forty cases were selected from clinical office practice for this series. The age range was from twelve through eighty-seven. The majority of patients were between forty and seventy-nine, numbering thirty-three cases. DBI was used alone in twenty-five of the cases, DBI in combination with insulin in fourteen cases, and DBI with sulfonylurea drug in one case. The dosage range in the patients treated with DBI alone was 50 to 150 mgm/Da; average dosage 75 mgm, maximum dosage 150 mgm, minimum dosage 25 mgm. The dosage range, when combined with insulin, was 50 to 100 mgm/Da; average dosage 75 mgm, minimum dosage 50 mgm/Da.

## Incidence of Side Reaction

In only two cases of the entire series was the drug discontinued because of inability to tolerate the drug, manifested by nausea, vomiting, and diarrhea, an incidence of 5 per cent.

## Degree of Control

Satisfactory control was achieved if the blood sugar fasting remained under 170 mgm per cent, weight was maintained and hypoglycemic episodes were kept at a very severe minimum. This was achieved in twenty-three out of twenty-five of those treated with DBI alone. In the group of DBI plus insulin, satisfactory control was achieved in ten out of fourteen. In the four cases considered unsatisfactory, reduction of insulin dosage was achieved on the average of 18 units of insulin, and avoidance of severe hypoglycemic reactions was achieved. The entire group, in which insulin plus DBI was the therapy, were of the labile brittle type of diabetic patients who were very difficult to manage prior to the institution of DBI.

The one patient, in whom DBI and sulfonylurea were used, was a case of secondary sulfonylurea failure in whom excellent control was achieved by the combination therapy. Satisfactory control was achieved in thirty-four of forty patients (85 per cent). The longer the duration of diabetes, the more difficult it was to achieve satisfactory control. The series pointed up that those responding best were patients having recently discovered diabetes, over the age of forty, with no previous therapy. Duration of therapy ranged from two months to twenty-seven months.

## Summary and Conclusions

The use of phenformin alone or in combination with insulin and sulfonylurea compounds in forty cases has been evaluated. Excellent control was achieved in 85 per cent of the cases, and in only two cases (5 per cent) was the drug discontinued because of undesirable side effects. In one of these, satisfactory blood sugar levels were maintained. Phenformin is safe and the oral hypoglycemic agent of choice because of absence of toxicity and wide range of activity in all types of diabetes. Recently, phenformin (DBI) has been released in the form of a time-disintegrating capsule, which should reduce even more the unpleasant gastrointestinal side effects.

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## *Forces Joined in Campaign Against Quackery*

The American Medical Association and the federal government have declared all-out war on medical quacks and charlatans who bilk the sick and gullible of hundreds of millions of dollars each year through useless gadgets, phony nostrums, fake reducing pills and the many other gimmicks of the medicine show trade.

The campaign was launched at the recent First National Congress on Medical Quackery, under joint sponsorship of the AMA and the U. S. Food and Drug Administration in Washington. Keynote speakers were Secretary of Health, Education and Welfare Abraham A. Ribicoff and Postmaster General J. Edward Day. Leonard W. Larson, M.D., president of the AMA, and Oliver Field, director of the AMA Department of Investigation, spoke for organized medicine.

Doctor Larson declared:

"We must educate the public thoroughly and effectively. We must wage psychological as well as scientific warfare. We must not only prove the worthlessness of quackery, but we also must establish confidence in sound medical and health care. Speaking for the American Medical Association and our 180,000 physician-members, I pledge our efforts to the final eradication of quackery and all its minions and satraps."

Secretary Ribicoff stated:

"The total cost of unnecessary or dangerous medications in this country probably exceeds $1 billion each year. Much of this expense is to men, women, and children who dearly need this money for good medical care or for other necessities of life.

"But quackery's cost in dollars only introduces the story. In terms of false hopes raised, in terms of ugly delusions fostered, in terms of tinkering with human life itself, the cost cannot be measured. The quack flirts with disaster. He challenges the sixth Commandment: 'Thou shalt not kill.'"

Postmaster Day stressed:

"The peddling of fake medical cures is the most prominent fraudulent activity conducted through the U. S. mails today. This huge 'industry'—and it has grown to that extent—is so prevalent and so widespread that it taxes the manpower of the Postal Inspection Service to the utmost in trying to bring the perpetrators to justice. We are doing everything we can to make more of our inspectors available to work on cases of this nature, to the extent it will not jeopardize enforcement in other fields."

# Mixed Tumor of the Parotid Gland Appearing As a Pharyngeal Mass

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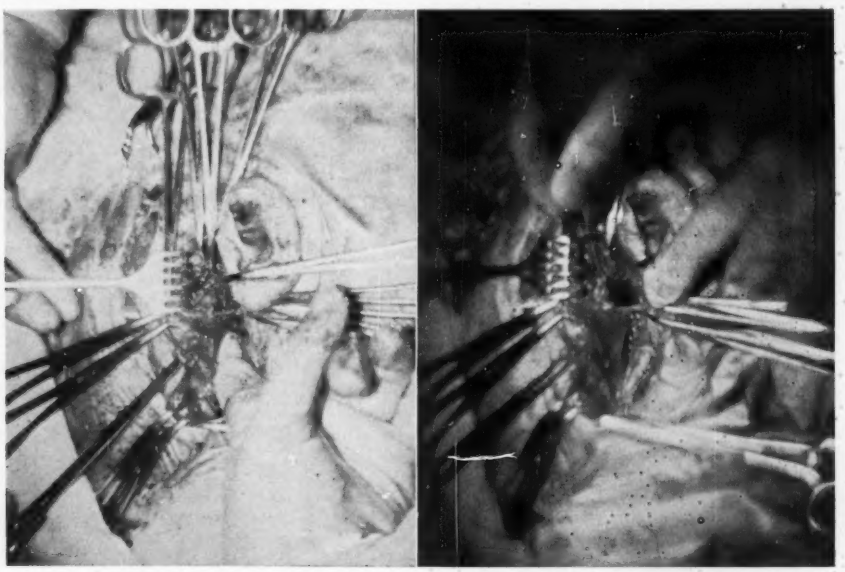
IN THE evaluation of a mass in the lateral pharynx, tumors originating in the parotid gland must be considered, and, of these, the benign mixed tumor is the most common.

The anatomical relations of the parotid gland are such that a developing tumor arising in the gland may appear as a mass in the lateral aspect of the pharynx. There is a deep extension of the gland lying posterior to the mandible, and anterior and inferior to the external auditory meatus. This extension is frequently referred to as the pharyngeal prolongation, and may be intimately related to the lateral pharyngeal wall. The main trunk of the facial nerve, anterior to the stylo-mastoid foramen, may lie within this prolongation, with the bulk of the parotid tissue below it, or surrounding it. The relationships of the external carotid artery within the gland anteriorly, and the internal carotid artery entering the temporal bone posteriorly, are also of surgical significance.

The presenting symptoms from such a lesion are usually a feeling of fullness in the throat with some difficulty in swallowing. The onset is exceedingly slow, with a duration extending as much as ten years. Paralysis of the facial nerve is almost never seen in benign lesions of the parotid, and if present should immediately suggest a malignant neoplasm.



Figs. 1 and 2. The external approach illustrating the exposure of the facial nerve and delivery of the tumor inward with a finger below the nerve (*left*). The opening above the nerve (*right*) likewise extends into the pharynx.

These tumors present problems primarily by occupation of space, and removal is indicated to prevent the difficulties of dysphagia, and eventually obstruction of the airway as well as the food passage. In

general, when the diagnosis is made, the tumor should be removed, for delay with growth to a greater size will only render the procedure more difficult.

As with any benign mixed tumor of the parotid, the goal is complete removal of the lesion with preservation of the facial nerve. Awareness of the anatomical relations will immediately demonstrate that removal with a wide margin of normal tissue is impossible.

The approach will frequently require intra-oral and external incisions. Exposure of the facial nerve with subsequent careful preservation of this structure is possible only with the external approach, and the modified Blair incision has long seemed the most satisfactory.

The accompanying illustrations demonstrate the removal of such a lesion. The intra-oral incision was made from the lateral aspect of the soft palate through the left tonsillar fossa. The mass lying on the prevertibral fascia extended downwards from the base of the skull and laterally around the styloid process, indicating intimate association with the facial nerve.

The mass was quite easily freed from surrounding structures by blunt dissection on all surfaces, except the lateral. An external approach through a modified Blair incision allowed careful dissection of the mass from the facial nerve. The tumor was then delivered through the pharyngeal incision with external assistance. The external wound was closed with a drain, and healed nicely. The incision in the throat was not closed, and healed in much the same manner and course as a tonsillar fossa following tonsillectomy.

The final photograph illustrates perfect function of the muscles innervated by the seventh nerve.

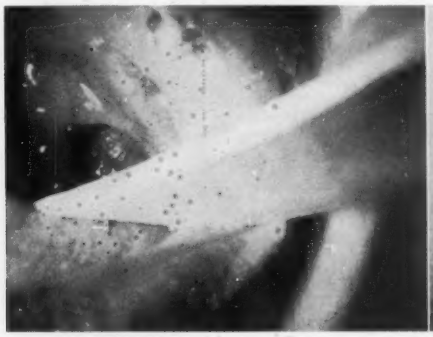


Fig. 3. The intra-oral incision one week following the operation.

Fig. 4. The dumbell-shaped tumor with the lateral mass removed and sectioned.

Fig. 5. Perfect function of the facial nerve and a nicely healed scar two weeks following the operation.

## Home Care Programs

In 1960, some 30 cities had 45 coordinated home care programs, caring for approximately 5,000 patients. These programs attempt to furnish medical, nursing, social, and rehabilitative services to selected patients in their own homes. These patients generally do not require all the treatment facilities of a hospital and are too ill or otherwise unable to visit a physician's office or an outpatient clinic.

# The Use of Retroperitoneal 100 Per Cent $CO_2$ in Urology

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FOR MANY years, a satisfactory method of retroperitoneal insufflation has been needed. The past method of using pure oxygen or nitrogen has been unsuccessful. Nitrogen and oxygen both can result in air embolism. Deaths from this cause have been reported in both instances. In addition to air embolism occurring instantaneously in the usage of retroperitoneal oxygen and nitrogen, delayed complications also are of consequence. The patient who is injected with oxygen or air will frequently retain the gas in the retroperitoneal space, the mediastinum or the subcutaneum for up to ten days, and carries this constant potential danger with him. The patient must be watched very carefully for signs of shock, respiratory distress and symptoms of the bends. In contrast to this, $CO_2$ retroperitoneal insufflation is advantageous. The carbon dioxide in the retroperitoneal space is totally absorbed within thirty to forty minutes. In normal usage, radiographs must be taken before five or ten minutes have elapsed, or an inadequate picture will result due to rapid absorption. Where delayed radiographs have been taken, we have been unable to demonstrate $CO_2$ remaining beyond an hour, consequently we have had no difficulty in regard to delayed complications of $CO_2$ insufflation. In addition, the danger of embolism is minimal since $CO_2$ can be readily injected into the blood stream where it is absorbed with sufficient rapidity that air embolism does not occur. Intravascular injection of $CO_2$ is employed in some centers to make cardiac ventriculograms. We are therefore not worried about the possibility of embolism with $CO_2$.

## Indications

Adrenal lesions can often be demonstrated with $CO_2$ insufflation. Pheochromocytoma, large carcinomas and cysts are well seen. Smaller lesions such as small adenomas or carcinomas may not be demonstrable. Hyperplasia may or may not show up well. The larger the lesion, the more easily it is demonstrated. Hyperplasia of 10 grams and over can be seen. In one specific instance, the size of the adrenals as measured by retroperitoneal $CO_2$ insufflation very accurately represented their actual size.

The main indication in renal pathology is the desire to see the renal outline, such as seen in renal cysts, neoplasms and duplication anomalies. If cystic congenitally separate upper pole is suspected, retroperitoneal $CO_2$ will frequently demonstrate this lesion. In selected cases where it is desirable to localize the renal outline accurately, retroperitoneal $CO_2$ is ideal. It should here be used only as an adjunct to pyelography. A tumor deformity found on an intravenous pyelogram, or retrogrades when an adequate shadow is not seen, can be readily further delineated by $CO_2$ and combined intravenous pyelogram or retrograde studies. In addition, the precise size of the tumor is seen, and this assists the operator in deciding upon his approach, whether through the flank or thoracoabdominal or Nagamatsu. We have made no effort to use this study as a means of determining whether tumors are solid or cystic.

One of the most useful areas in which this study has been used is in determining the presence or absence of retroperitoneal masses. In many instances, the splenic shadow is read as a retroperitoneal mass, and this is readily demonstrable by retroperitoneal $CO_2$ insufflation as not being present in the retroperitoneal area.

In the investigation of hypertension, $CO_2$ is sometimes indicated to assess renal size accurately. It can be done at the time of retrogrades during the Howard test without much added risk.

It is also worthy of note that in any instance where retroperitoneal fibrosis or retroperitoneal inflammations, such as perinephritis, has occurred, the $CO_2$ study tends to be of little value, since the gas does not diffuse through fibrotic or inflamed tissues. The study has also been of no use in delineating any ureteral lesions.

## Materials

The equipment required for retroperitoneal $CO_2$ is minimal. $CO_2$ in 100 per cent concentration can be purchased. It is to be noted that frequently $CO_2$ cylinders supplied are not 100 per cent $CO_2$ but the 5 per cent $CO_2$ used in anesthesia, and this must be watched since 5 per cent $CO_2$ is not desirable for insufflation. On the $CO_2$ cylinder, 2 meters are desirable, one pressure gauge, which indicates the

amount of pressure remaining in the cylinder, and the other, a flow meter such that the flow rate can be measured and the amount of $CO_2$ calculated by timing the injection. This apparatus can be purchased from most instrument houses, particularly those that handle anesthesia equipment. A straight 1/4 inch rubber tubing, approximately 5 or 6 feet long, is led from the flow meter to a three-way stop cock which is tied to the end of this tubing with umbilical tape. The three-way stop cock is useful since the flow can be temporarily diverted if the patient has pain. In addition, the stop cock allows one to test for the patency of the line. The three-way stop cock also fits nicely into the Rochester needle.

A Rochester needle* is a composite needle consisting of an ordinary 16-gauge tapered pointed needle, over which is placed a piece of plastic tubing which is affixed to a Luer lock attachment such that the 16-gauge needle may be withdrawn, leaving a plastic tube and Luer lock attachment in place. The technique of introducing the Rochester needle is explained elsewhere. After the apparatus is in place, the pressure gauge is turned on and the flow meter set at 1 liter per minute. This is timed for 60 seconds, the patients thereby receiving 1 liter of retroperitoneal $CO_2$.

## Method

Patients in whom retroperitoneal $CO_2$ insufflation is contemplated are normally prepared as for intravenous pyelogram, and in many instances pyelography is concomittant to $CO_2$ insufflation. They are given 1 ounce of castor oil the evening before. A cleansing enema is administered the evening before, and the patient is fasting from midnight of the evening before. In addition to preparation for an intravenous pyelogram, it has been our custom to administer routine preoperative sedation one hour previous to the hour of $CO_2$ injection. Demerol in 100 mgs. has proved very satisfactory. The patient is not usually given a general anesthesia, although insufflation, of course, can be carried out this way. It has been our experience that having the patient awake and cooperating is of more use and less difficulty than having the patient anesthetized. The discomfort that arises from retroperitoneal $CO_2$ insufflation is usually minimal, Demerol sedation in these cases being adequate. Usually, patients complain of crampy abdominal discomfort and this indicates that the $CO_2$ is going retroperitoneally. Severe abdominal pain may indicate that there is excess $CO_2$ in the retroperitoneal space and some dissection of the mesentery is occurring, in which case the procedure is terminated and the radiographs are taken. A scout radiograph of the abdomen is taken initially to determine technique and to determine the fecal gas pattern, to see whether the insufflation can be accomplished and interpreted. Excessive gas and feces in the intestinal tract indicate postponement of the procedure until better preparation is available. Once the technique of radiography has been determined by scout radiograph of the abdomen, the patient can be placed in the knee-chest position or, more preferably, in the lithotomy position. The genitalia and perianal area are prepared and, with a finger in the rectum, a one centimeter skin wheal is raised with a local anesthetic between the anal margin and the coccyx. Allowing a minute or two for this to take effect, a Rochester needle is inserted into the retrorectal space, and the palpating finger can readily determine when the plane between the coccyx and rectum has been entered. Care should be taken to avoid penetration of the rectum; this can readily be accomplished by having a finger in the rectum. Once the needle is in place, the rectal finger is withdrawn, and the steel center of the Rochester needle is removed, leaving the plastic coating *in situ*. The Luer lock attachment on the Rochester needle is then inserted into the three-way stop cock, which is opened.

## Complications

Initial reactions include severe abdominal pain. This is most likely to happen when the needle has entered the rectum and the colon is being distended by gas. Severe pain can also occur if excessive amounts of $CO_2$ are injected and the mesentery is dissected. Severe pain is an indication to stop the procedure and take a radiograph. In most of these cases, the procedure can be continued if the radiographs are inadequate, since the pain rapidly subsides.

Respiratory distress may be seen as acute dyspnea and a choking sensation. This is usually due to mediastinal $CO_2$, and tipping the patient head down will encourage dissolution and absorption of $CO_2$. Occasionally, the patient's blood pressure falls in this instance. The head-down position also assists venous return. No persisting shock has been seen.

Subcutaneous $CO_2$ has been seen in the neck due to excessive injections. If the emphysema appears in the buttocks or thighs or scrotum and perineum, the needle has been misplaced. The subcutaneous $CO_2$ is rapidly absorbed.

No fatalities have occurred in twenty cases.

*Rochester Instrument Mfg., Co., Rochester, Minn.

# The Use of Bisacodyl (Dulcolax) in Preparation For Barium Enema Examination

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THOROUGH cleansing of the large bowel with minimal patient discomfort is desirable as a preliminary to proper roentgenologic examination of the lower intestinal tract, urinary tract and spine. For many years, the standard preparation for such procedures has included castor oil. Recent reports[1-4] have indicated that a new drug (Bisacodyl) can adequately cleanse the colon with significantly less patient discomfort than occurs with castor oil. Accordingly, a comparative evaluation of castor oil and bisacodyl with regard to both effectiveness and patient subjective response was undertaken at The University of Michigan Health Service.

TABLE I.
AGE AND SEX DISTRIBUTION—140 PATIENTS

| Age | Male | Female |
|---|---|---|
| 20-29 | 5 | 5 |
| 30-39 | 47 | 3 |
| 40-49 | 42 | 1 |
| 50-59 | 22 | 3 |
| 60-69 | 4 | 3 |
| 70-89 | 4 | 1 |
| Total | 124 | 16 |

The group of patients examined in this series differs from those in previous reports.[1-4] Of the 140 patients examined, 134 were members of The University of Michigan faculty undergoing a periodic health appraisal which included roentgenologic examination of the gastrointestinal tract. The details of this study have been reported elsewhere.[5,6] It should be recognized that these patients represent an essentially asymptomatic group of apparently healthy individuals. The remaining six patients were students.

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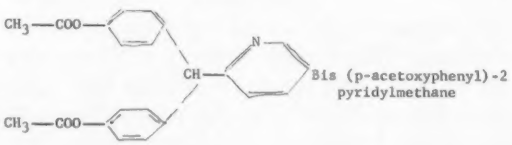
Most of the patients were male and all were seen on an out-patient basis. The ages range from thirty to eighty-eight years. The exact age and sex are outlined in Table I. In general, it can be assumed that the group of patients examined is one of high intelligence, with good ability to follow instructions and to cooperate. Instructions to the patient were thoroughly carried out without exception, and subjective information obtained from patients was considered to be highly reliable.

## Chemistry and Pharmacology

Bisacodyl, known commercially as Dulcolax, is a synthetic compound which is insoluble in water or alkaline solution but soluble in dilute mineral acids and organic solvents. It has no taste, odor or color and is one of a group of contact laxatives made up of Bis (p-acetoxyphenyl)-2 pyridylmethane. It is said to be the most active of this group of compounds due to the presence of a nitrogen atom in the alpha position on the pyridine ring.[2]




Pharmacologically, the compound acts primarily upon the mucosa of the large bowel with increase in peristaltic activity. It is a contact laxative and is not dependent on systemic absorption. Fortsch[7] demonstrated that it is not present in the milk of nursing mothers. Other experimental work has indicated that it acts neurogenically by selective stimulation of the

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Part of the bisacodyl (Dulcolax-TM) used in this series was supplied by Geigy Pharmaceuticals, Yonkers, N. Y.

parasympathetic nerve supply of the colon.[2] Going and Schaumann[8] demonstrated abolition of effectiveness of Dulcolax suppositories by the use of topical anesthesia of the mucosa of the rectum and the sigmoid.

the time of the barium enema procedure as to effectiveness of the cathartic, tonicity of the colon, and any evidence of irritative phenomena during the fluoroscopic examination.

Pre-evacuation radiographs were posterior-anterior

TABLE II. AGE AND SEX DISTRIBUTION BY METHOD OF PREPARATION

| Age | Group I | | Group II | | Group III | |
|---|---|---|---|---|---|---|
| | Castor Oil | | Bisacodyl—10 mg. (o) at h.s., 10 mg. Suppository h.s. and a.m. | | Bisacodyl—15 mg. (o) at h.s., 10 mg. Suppository a.m. | |
| | Male | Female | Male | Female | Male | Female |
| 20-29 | 2 | 4 | 0 | 0 | 3 | 1 |
| 30-39 | 17 | 0 | 7 | 0 | 23 | 3 |
| 40-49 | 22 | 1 | 7 | 0 | 13 | 0 |
| 50-59 | 12 | 1 | 5 | 2 | 5 | 0 |
| 60-69 | 1 | 2 | 1 | 0 | 2 | 1 |
| 70-79 | 0 | 1 | 2 | 0 | 2 | 0 |
| Sub-total | 54 | 9 | 22 | 2 | 48 | 5 |
| Total | 63 | | 24 | | 53 | |

The therapeutic index of bisacodyl is 1:200[2] and no toxicity has, to our knowledge, been reported. The product is supplied in 5 mg. enteric coated tablets and 10 mg. suppositories.

In contrast, castor oil is an irritant which acts primarily on the small bowel and often leaves residual oil droplets in the colon which must be distinguished from polyps.

## Methods

Three different methods of preparation were used. On the day preceding the examination all patients had a light noon meal, and supper consisted of a pure liquid diet, omitting milk. None of the patients had anything to eat or drink on the morning of the examination. The patients in Group I were given 2 ounces of castor oil at 5:00 p.m. on the evening preceding the examination. Cleansing enemas were not used. The patients in Group II were given 10 milligrams of bisacodyl orally at 10:00 p.m. on the evening before the examination. In addition, these patients used one 10 mg. bisacodyl suppository at the same time. On the morning of examination, two hours before the scheduled barium enema, an additional 10 mg. suppository was used. The patients in Group III were given a 15 mg. oral dose of bisacodyl at 10:00 p.m., and the evening suppository was omitted. They, too, used a 10 mg. suppository two hours before the x-ray examination.

The radiologist was not informed in advance of the examination as to the type of preparation used by the patient, and patients were advised not to divulge such information to the examiner. Notations were made at

projections. Exposure factors were: 100 kv. and 200 ma. The post-evacuation films were exposed at 90 kv. and 200 ma. The barium enema mixture contained a 1 per cent solution of tannic acid.

Within a few days after the barium enema examination, the patients were interviewed as to their personal evaluation of the preparation used, the time of onset of evacuation, loss of sleep, abdominal cramps, or other adverse effect. Those patients who had previously had a barium enema examination with castor oil preparation and who were given bisacodyl on this occasion were asked for a subjective comparison of the two methods of preparation.

At the time of radiograph interpretation, the examining radiologist was asked to state his impression as to the effectiveness of the large bowel preparation. Three categories were used:

1. E: Excellent (either complete absence of any residual fecal material, fluid and gas, or virtually none of these residua.)
2. G: Good (Minimal residual feces, fluid, or gas, but not of sufficient magnitude to interfere with good diagnostic quality.)
3. P: Poor (excessive amount of residual feces or fluid resulting in inconclusive results and the need for repeat examination.)

The objective opinion of another radiologist was then obtained. The pre-evacuation radiographs of all patients were assessed by him and categorized in the previously described fashion. Three separate readings, without knowledge of the type of preparation used, were made at approximately one-week intervals. Finally, the same set of pre-evacuation radiographs was interpreted again by the original examining radiolo-

gist. In this manner, five separate opinions were obtained on each case. The final tabulated impression as to the effectiveness of preparation thus represents the majority of five separate readings.

4 a.m. and 6 a.m., but more often closer to six and one-half hours following oral administration of the tablets. These patients, as in Group II, had few complaints about the method of preparation. The morning suppository was effective in twenty-six of the fifty-three cases, or about 50 per cent. The examination was well tolerated, and the large bowel rarely showed evidence of increased irritability at the time of examination. The few patients who had the experience of having had castor oil at one time and bisacodyl at another were unanimously in favor of the bisacodyl preparation. No nausea, urticaria or other side reactions were encountered in the Group II and III patients.

TABLE III. COMPARISON OF BOWEL PREPARATION WITH CASTOR OIL AND BISACODYL

| Preparation | Total Patients | Evaluation | | |
|---|---|---|---|---|
| | | Excellent | Good | Poor |
| Group I | | 22 | 32 | 9 |
| Castor oil | 63 | 34.9% | 50.8% | 14.3% |
| Group II | | 9 | 11 | 4 |
| Bisacodyl (10 mg. + 2 suppositories) | 24 | 37.5% | 45.8% | 16.7% |
| Group III | | 23 | 26 | 4 |
| Bisacodyl (15 mg. + 1 suppository) | 53 | 43.4% | 49.1% | 7.5% |

## Results

The Group I patients who had been given castor oil experienced more discomfort with the praparation than Groups II and III. All of these subjects objected to the taste and odor of castor oil. Many complained of cramps, rectal and perianal irritation, and were tired and disgruntled on arrival at the x-ray department, due to sleeplessness and discomfort during the preceding night. Repeat examinations, necessary because of poor preparation, were refused by three patients in this group, all of whom gave castor oil preparation as the cause for their refusal. At the time of examination, the castor oil group displayed more apprehension and showed evidence of persistently increased colon irritability with localized, generalized colon contractions which sometimes resulted in inability to retain the enema long enough for adequate fluoroscopy and radiographing.

The Group II patients had fewer complaints about the preparation. The evening suppository resulted in a formed stool in approximately twenty to sixty minutes. None of the patients complained of loss of sleep. The tablets were ingested at 10 p.m., and most patients had their first bowel movement between 4 a.m. and 6 a.m. The morning suppository, given two hours before the examination, resulted in additional passage of feces and fluid in eighteen of the twenty-four patients, but had little or no effect in the remaining six patients. During the barium enema procedure, the colons of these patients did not appear to be as irritable as had been the case in the Group I (castor oil) patients. The procedure was better tolerated, and none of these patients objected to repeat examinations.

The Group III patients showed results superior to Groups I and II in effectiveness of cleansing of the large bowel. The first evacuations occurred between

On a statistical basis, there was no significant difference in the cathartic effect in the three groups of patients, (Chi-square 2.1969; degrees of freedom, 4; p, approximately .70). Similarly, Group I with castor oil preparation was compared with Group III as the superior bisacodyl preparation. Again, there was no statistically significant difference between these groups, (Chi-square 1.7154; degrees of freedom, 2; $.40 < p < .50$).

*Discussion.*—Although there was not a significant statistical difference in the cathartic quality of castor oil, as compared with bisacodyl, there is a great difference in the subjective response of the patient. It is our opinion, on the basis of this comparative study and on the basis of many discussions with the patients on the merit of various preparations, that the use of bisacodyl in a dose of 15 mg. orally at 10 p.m., and 10 mg. as a suppository two hours before the examination is the method of choice, and this is now the standard method of preparation at the University Health Service.

## Summary

One hundred and forty patients were prepared for barium enema examination with either castor oil or

bisacodyl. The cleansing effectiveness of the two methods of preparation was compared and no statistically significant difference between the methods of preparation was apparent. The patient's subjective response was overwhelmingly in favor of bisacodyl preparation and, for this reason, we consider it to be the method of choice.

### Acknowledgment

The authors appreciate the assistance in statistical evaluation given by Dr. Richard D. Remington, of the University of Michigan School of Public Health.

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## *Ask Doctors Help in Study of Insect Stings Allergy*

The American Academy of Allergy is seeking the help of doctors of medicine in a study of the history and treatment of allergic reactors to insect stings.

The request for Michigan participation was presented to The MSMS Council, which sought an opinion from the MSMS Legal Counsel. In part, the opinion said:

"Since compliance with this request would require that the individual physician disclose information acquired by him in the treatment of his patient, I am of the opinion that, for the complete protection of the individual physician, the consent of the patient to the release of the information should be obtained.

"As you know, the laws of Michigan are quite specific on the matter of disclosure of information regarding a patient and are even more strict than that of many other states. In our state, disclosure of confidential information about a patient is not only made a ground for revocation of license under the Practice Act but is also, under a separate statute, grounds for criminal prosecution."

The American Academy of Allergy study is conducted by volunteer physician members of The Academy without cost to the patient. Cooperating patients will be sent a wallet-size card to alert medical personnel to the possibility that a sudden severe illness might be caused by insect sting allergy. The Academy will take the names from the doctors and mail each a questionnaire to be filled out by the patient. A follow-up annual inquiry of the patient will be made as to whether he has been stung during the year, by what type of insect, if known, and with what results. Some of these patients will have had no immunization for stinging insects, some will have had a few immunizing doses and some may be treated with a long term course of hyposensitization. By comparing the subsequent sting history of persons in these various catagories, the Academy hopes to learn the most desirable therapeutic course to follow.

# Reduction in Body Weight and Blood Pressure Following Administration of Benzphetamine Hydrochloride (Didrex®)

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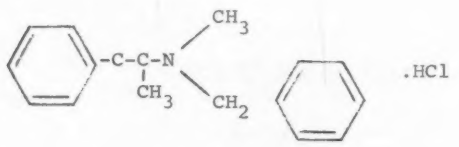
MODELL[1] recently noted that the sympathomimetic effects of amphetamines on the cardiovascular system may be more developed in some members of the group than others. These effects may include a rise in blood pressure, increase in cardiac work and heart rate or the development of arrhythmias. Since the anorexiant drug, benzphetamine hydrochloride*, with the following structural formula, is clearly an amphetamine congener, it seemed important to see if dosages sufficient to induce appetite suppression would have significant effects on blood pressure, pulse rate or cardiac rhythm.




In our earlier study[2] of 24 men given benzphetamine tablets, 50 mg., and 25 given matching dummy ones, three times daily for 28 days, single blood pressure determinations done before and after the test period did not seem to be changed in either group. Mean pre-drug pressure was 138.0/96.3. After 150 mg. of benzphetamine daily for 28 days, mean pressure was 135.8/97.1 mm. Hg. In the control group of men the corresponding mean values were 136.3/91.4 and 129.4/94.8 mm. Hg. Thus insignificant reductions in systolic values, and elevations in diastolic pressures were observed in both drug and placebo groups.

In an effort to study this matter in greater detail the present investigation was carried out.

## Materials and Methods

Twenty adult male subjects with hypertension (systolic pressure of 150 mm. Hg. or more, diastolic pressure of 90 mm. Hg. or more, or both) were studied. Fourteen were consistently hypertensive. The remaining six had blood pressure elevation on repeated occasions but not every day (Subjects 10, 12, 15, 17, 18, 20). Prior to drug administration, blood pressure determinations with the same sphygmomanometer were done on each man morning and afternoon daily for 23 days. The morning blood pressures were taken as early as possible, preferably before breakfast, but at the same time for each individual. Each man rested for two minutes in a chair prior to the taking of his blood pressure in the standing position. Body weight and height were recorded. Baseline blood urea nitrogen values, complete blood counts and urinalyses for albumin were obtained.

After this control period all men were given one 50 mg. tablet of benzphetamine three times daily, before meals, for 30 days. (The medication was rebottled by us and dispensed as "blood pressure medicine." No hint was given that it was expected to have an effect on appetite.) Morning and afternoon blood pressure determinations were continued in exactly the same way. Urine specimens were examined weekly.

All men were interviewed individually and daily the first week of drug administration and then approximately three times weekly during the test period. Leading questions concerning appetite or diet were avoided.

At the end of the 30-day test, twice-daily blood pressure readings were continued for six additional days to establish mean post-treatment levels. Body weights, blood urea nitrogen values, urinalyses and complete blood counts were repeated. A brief final interview was done to assess the over-all opinion of effectiveness of the drug with particular reference to blood pressure and side effects.

## Results

*Weight Change.*—Following the 23-day control interval, during which no significant weight changes were noted, every man lost some weight during the 30-day treatment period, as may be seen in Table I. Aggregate loss was 132.00 pounds, with a mean plus or minus standard error of 6.60 $\pm$ 1.03 pounds. The

*The Upjohn Company trade name for benzphetamine hydrochloride is Didrex®.

TABLE I. COMPOSITION OF STUDY GROUP, WEIGHT AND BLOOD PRESSURE CHANGES NOTED

| No. | Race | Age | Height | Pre Rx Wt. | Excess Wt.[1] | Wt. Lost | Pre Rx B.P.[2] | Post Rx B.P.[2] | Change B.P. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | N | 47 | 5-8½ | 188.00 | +21.00 | − 9.00 | 196.3/152.2 | 162.0/137.3 | −34.3/−14.9 |
| 2 | N | 36 | 5-11 | 190.25 | +16.25 | − 8.25 | 134.3/110.3 | 132.0/101.0 | − 2.3/− 9.3 |
| 3 | W | 39 | 5-10½ | 260.50 | +88.50 | −17.00 | 129.0/112.0 | 128.0/105.0 | − 1.0/− 7.0 |
| 4 | N | 68 | 5-9¾ | 238.50 | +66.50 | − 7.00 | 174.0/121.3 | 164.3/125.7 | − 9.7/+ 4.4 |
| 5 | W | 27 | 5-6 | 223.75 | +75.75 | −17.50 | 135.7/ 98.0 | 141.7/ 91.3 | + 6.0/− 7.7 |
| 6 | W | 64 | 5-7 | 177.00 | +18.00 | − 7.00 | 170.0/112.3 | 143.0/102.3 | −27.0/−10.0 |
| 7 | W | 57 | 5-6 | 189.50 | +32.50 | − 2.00 | 151.3/105.0 | 150.0/103.7 | − 1.3/− 1.3 |
| 8 | N | 42 | 5-10½ | 193.50 | +17.50 | − 4.50 | 117.7/ 93.3 | 113.7/ 88.3 | − 4.0/− 5.0 |
| 9 | W | 41 | 5-8 | 176.25 | +11.25 | − 4.50 | 136.0/113.3 | 128.3/107.3 | − 7.7/− 6.0 |
| 10 | W | 59 | 5-7½ | 186.25 | +22.25 | − 4.50 | 113.7/ 86.0 | 104.0/ 80.0 | − 9.7/− 6.0 |
| 11 | W | 37 | 5-9¼ | 169.00 | + 2.00 | − 6.50 | 136.0/ 97.0 | 129.7/ 94.7 | − 6.3/− 2.3 |
| 12 | W | 60 | 5-3¼ | 142.50 | − 0.50 | − 6.00 | 140.7/ 85.0 | 119.0/ 80.7 | −21.7/− 4.3 |
| 13 | N | 46 | 5-8¼ | 157.75 | − 8.25 | − 8.25 | 172.0/150.7 | 155.3/133.0 | −16.7/−17.7 |
| 14 | N | 65 | 5-3¾ | 144.50 | − 0.50 | − 5.00 | 173.3/101.0 | 154.0/ 95.3 | −19.3/− 5.7 |
| 15 | N | 37 | 5-7¾ | 142.25 | −17.75 | − 1.75 | 125.7/ 89.3 | 120.3/ 82.7 | − 5.4/− 6.6 |
| 16 | N | 58 | 5-8 | 162.25 | − 3.75 | − 4.25 | 132.0/107.2 | 128.7/102.7 | − 3.3/− 4.5 |
| 17 | W | 38 | 5-2 | 131.00 | − 6.00 | − 5.25 | 118.0/ 89.7 | 119.3/ 98.7 | + 1.3/− 1.0 |
| 18 | W | 24 | 5-8¾ | 146.25 | − 5.75 | − 1.25 | 115.7/ 87.8 | 107.0/ 82.7 | − 8.7/− 5.1 |
| 19 | N | 53 | 5-7¼ | 162.50 | − 0.50 | − 2.50 | 147.7/104.7 | 138.3/101.3 | − 9.4/− 3.4 |
| 20 | W | 33 | 5-10¼ | 159.50 | −11.50 | −10.00 | 126.0/ 86.0 | 118.7/ 86.0 | − 7.3/0 |

[1]Based on Society of Actuaries' 1959 Tables.
[2]Mean blood pressure final six days of 23-day control period, morning readings.
Six-day mean values (A.M.) following cessation of drug administration.

men who were overweight 11 or more pounds (Subjects 1-10) prior to drug administration lost an average of 8.13 pounds. But even Subjects 11-20, who were not obese, lost an average of 5.08 pounds. And this occurred during 30 days without limitation on dietary intake.

*Cardiovascular Aspects.*—In order to increase "n" for statistical purposes, 46 control blood pressure values were obtained on each subject prior to benzphetamine, 60 during the test period, and 12 were recorded after administration was stopped. (See Table II.) The only striking and significant alteration in blood pressure was reduction in mean systolic values in the post-treatment determinations. This was true of the morning data whether compared with the entire 23-morning experience or the six-day pretreatment values. The reduction in mean afternoon systolic pressure was significant when compared to the 23-day control average, but not when the six-day pretreatment value was used. Overlapping of these six diastolic confidence intervals clearly showed no difference between these six means at the five per cent significance level.

Alterations in pulse rate or regularity, as noted when blood pressures were taken, were not observed.

*Side Effects.*—Impaired appetite, noted by all subjects to some degree, was reflected by weight loss. Interference with sleep was the rule the first night or two but thereafter all slept except one. He complained of some difficulty getting to sleep throughout. Dryness of the mouth was reported by 11 men, increased salivation by one, mood elevation by five, increased sweating and dizziness each by four. Increased urinary frequency was noted by two men, hesitancy by another. Two reported decreased libido, one an increase. Four observed increased sweating, two others, a decrease. Nausea, possibly

TABLE II. MEAN BLOOD PRESSURE VALUES, MORNING AND AFTERNOON, FOR 20 MEN AT DIFFERENT INTERVALS OF THE STUDY

| Time Done | Period | Pressure Component | "n" Observations | Mean (mm. Hg.) | Standard Error | 95% Confidence Limits |
|---|---|---|---|---|---|---|
| A.M. | 23-day control period | Systolic | 460 | 143.07 | ±1.08 | 140.95—145.19 |
| | | Diastolic | 460 | 102.73 | ±0.82 | 101.12—104.34 |
| A.M. | Final 6 control days | Systolic | 120 | 142.25 | ±2.18 | 137.98—146.52 |
| | | Diastolic | 120 | 104.65 | ±1.71 | 101.30—108.00 |
| A.M. | First 6 days on drug | Systolic | 120 | 136.65 | ±2.03 | 132.67—140.63 |
| | | Diastolic | 120 | 104.33 | ±1.61 | 101.17—107.49 |
| A.M. | First 6 days *after* drug stopped | Systolic | 120 | 132.85 | ±1.78 | 129.36—136.34 |
| | | Diastolic | 120 | 99.56 | ±1.48 | 96.66—102.46 |
| P.M. | 23-day control period | Systolic | 460 | 142.91 | ±1.09 | 140.77—145.05 |
| | | Diastolic | 460 | 101.91 | ±0.77 | 100.40—103.42 |
| P.M. | Final 6 control days | Systolic | 120 | 141.07 | ±2.17 | 136.82—145.32 |
| | | Diastolic | 120 | 102.44 | ±1.52 | 99.46—105.42 |
| P.M. | First 6 days on drug | Systolic | 120 | 137.50 | ±1.90 | 133.78—141.22 |
| | | Diastolic | 120 | 104.53 | ±1.53 | 101.54—107.52 |
| P.M. | First 6 days *after* drug stopped | Systolic | 120 | 135.20 | ±1.83 | 136.61—138.79 |
| | | Diastolic | 120 | 99.02 | ±1.33 | 96.41—101.63 |

drug related, occurred in three instances and one man vomited. Loose stools and flatulence were each reported once. Several noted increased energy. Two said the pills made them relaxed and "lazy."

Blood urea nitrogen values at the end of 30 days' drug administration were unchanged from the controls. Urinalyses and complete blood counts, all negative prior to the trial, were still within normal limits.

## Discussion

The findings in this study confirmed those of Rhoades,[3] Poindexter[4] and Stough.[5] Systolic blood pressure may be significantly lowered in hypertensive patients given benzphetamine. The design of the experiment was such that the effect of novelty, unfamiliar procedures and so on, was largely ruled out by repetition prior to drug administration. A slight fall in both morning and afternoon systolic levels was observed during this control period. And at the end of the 30-day drug trial, significant further weight loss and blood pressure reduction had occurred. (There was no correlation between the number of pounds lost and the lowering of blood pressure.) From the practical standpoint of management of the obese hypertensive patient, it does not matter whether reduction in blood pressure is due to the anorexiant drug *per se*, or to loss of body fat. Lowering of body weight and blood pressure are both to his advantage.

It was noteworthy in this series, selected on the basis of hypertension rather than obesity, that the ten men who were not overweight lost from 1.25 to 10 pounds during drug administration. This apparently reflected the anorexiant effect of benzphetamine, an effect independent of the initial weight status of patients given the drug.

The side effects noted during the first few days and nights of treatment were similar to those we reported earlier[2] and which have been noted by others[3-5] giving 150 mg. of benzphetamine daily. This dosage is probably excessive, and certainly unnecessary, at least at the beginning of administration for the management of obesity. In many instances a good anorexiant effect may be obtained with 50 or even 25 mg. of benzphetamine once daily.[6]

## Summary

Following a 23-day control period, during which blood pressure determinations were made twice daily on each of 20 hypertensive men, 50 mg. tablets of benzphetamine hydrochloride (Didrex®) were given thrice daily before meals for 30 days. Blood pressures were recorded twice daily during this test period and for six days after the drug was discontinued. Analysis showed a significant weight loss averaging 6.60 ± 1.03 pounds. All 20 men lost weight, including 10 who were not initially overweight. Eighteen men had a decrease in systolic blood pressure. The average reduction in the 20 subjects was 9.40 ± 2.39 mm. Hg., also significant at the five per cent level. Diastolic levels were unchanged at the conclusion of the 30-day study.

In discussion it was pointed out that this did not support the thesis that benzphetamine was a hypotensive agent. Rather, it suggested that the reduction in body mass was reflected by lowering of systolic pressure. From the practical standpoint of management of the obese hypertensive patient, it did not matter whether reduction in blood pressure was due to the anorexiant drug *per se*, or to loss of body fat. Lowering of body weight and blood pressure would both be to his advantage.

It would seem from the experience reported here that benzphetamine is a safe, effective adjunct in the weight reduction program of the obese patient with hypertension.

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# Leiomyoma of Tunica Dartos Scroti

## A Case Report

Clifford D. Benson, M.D.
Jeremy D. Webster, M.D.
John R. McDonald, M.D.
Detroit, Michigan

LEIOMYOMA of the tunica dartos scroti, not to be confused with leiomyoma of the testicular tunics, is a rare lesion. In 1937, Stout,[1] in a review of the world literature, was able to find three cases of leiomyoma of the dartos. We have been able to find no further cases and are adding a fourth case of leiomyoma of the dartos muscle.

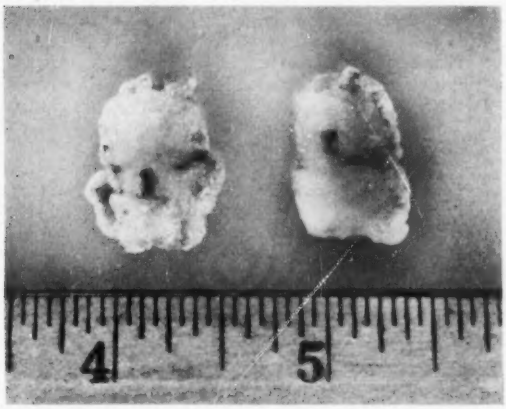

Fig. 1. Leiomyoma of dartos muscle. The tumor is whitish.

### Case Report

W. W., a thirteen-month-old white male child, had a history of fulness in the left inguinal region of six months' duration. The fulness was evident on crying or straining. In addition, there was a mass present in the scrotum of ten month's duration which varied in size. Two months prior to admission, the mass in the scrotum became firmer according to the parents. The remainder of the history was non-contributory.

*Physical Examination.*—Examination of the patient was negative except for the inguinal region and scrotum. There was a globular mass in the inguinal region associated with the spermatic cord. The mass was one centimeter in diameter and reduced in size on manual pressure. The separate mass was located in the dependent portion of the left scrotum and was firm, smooth and not tender. The mass measured three by two centimeters and was not attached to the underlying testicle but caused some indentation of the overlying skin.

*Laboratory Data.*—The urinalysis revealed no abnormalities. The hematological studies revealed a hypochromic microcytic anemia of 9.5 grams, and a leukocytosis of 12,300.

*Operative Findings.*—Exploration through a left transverse inguinal incision revealed an indirect inguinal hernia and communicating hydrocele of the spermatic cord. These were repaired and excised, and the wound closed in layers. A separate hard mass was palpated in the left wall of the scrotum which was not attached to the testis. The tumor attached to the scrotal skin caused dimpling of the skin. The tumor and overlying skin was completely excised, a drain was inserted, and the wound closed.

*Pathology.*—Gross examination of the specimen revealed a whitish nodular mass that measured 1 x 5 x 2 centimeters (Fig. 1). Histologically, the tumor was composed of interlacing bundles of mature smooth muscle merging into islands of spindle cells which show mucoid degeneration of the cytoplasm (Fig. 2). There was some collagenous fibrous tissue between the smooth muscle. There were no mitotic figures or evidence of anaplasia in the smooth muscle. The tumor was diagnosed as a leiomyoma.

From the Departments of Surgery and Pathology, Harper Hospital and Wayne University College of Medicine, Detroit, Michigan.

The Author

CLIFFORD D. BENSON, M.D.

## Discussion

There has been much confusion in the literature as to leiomyomata in the scrotal area. Hinman and Gibson[5] state that tumors of the testicular tunics are difficult to distinguish from those arising in adjacent structures. They further propose that they may be

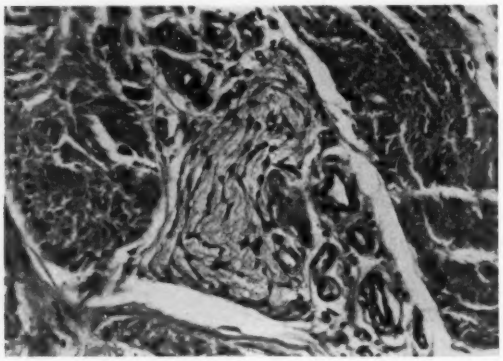

Fig. 2. Leiomyoma of dartos muscle. Note the well-differentiated smooth muscle cells. H & E X 90.

derived from the smooth muscle fibers of the cremasteric internus of the tunica vaginalis communis. Thompson[6] states that these may actually arise from the gubernaculum.

Being true peritoneum, the tunica vaginalis contains no smooth muscle; however, one can postulate that leiomyomas may arise from this tissue due to misplaced or ectopic mesodermal elements.

Some mention must be made of the adenomatoid tumors of the epididymis. Longo, McDonald and Thompson[7] reported that these tumors always have smooth muscle elements, and, at times, may be void of adenomatous tissue and appear as a pure leiomyoma. These, however, are located in the epididymis and must not be confused with leiomyoma of the tunica dartos. This lesion is in the wall of the scrotum and is not attached to the epididymis or testicular tunics.

## Summary

A case of leiomyoma of the tunica dartos scroti has been presented and the literature reviewed.

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## *Rheumatoid Arthritis*

Evidence that there is some association between unexpressed hostility and rheumatoid arthritis is fairly substantial, a University of Michigan researcher explained at a pre-convention meeting of mental health and psychiatric nurses, held in Ann Arbor in November.

Dr. Sidney Cobb, epidemiologist and a program director for the University of Michigan Survey Research Center, said not all cases of rheumatoid arthritis follow this behavior pattern—since it is suspected that heredity, infection and trauma (injury and shock) may be important factors in some cases.

He mentioned two types of home environment in which the nurses might look for psychosomatic manifestations, some of which he described in case histories.

The first situation is mutual, unexpressed hostility in which tension can be felt in the air.

"This situation is self-propagating and probably contributes to headache, backache, rheumatoid arthritis, divorce and delinquency," Dr. Cobb said.

"The second thing to watch for is the mixture of hostility and dependency in the same individual or the same family. One might expect that a hostile individual would find it more difficult to get his dependency needs met and might therefore be more susceptible to duodenal ulcer."

# Nineteen Sixty-one

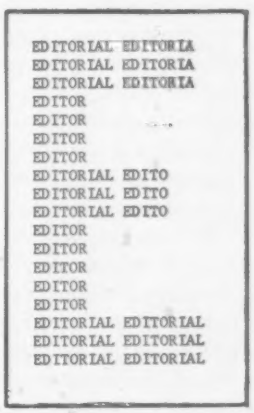
With this December number of THE JOURNAL, we bid farewell to the year 1961 with a feeling of satisfaction and belief that the medical profession has again written its mark upon medical history. THE JOURNAL, in its original articles, in its committee reports, in its registering of activities, functions and programs, has recorded many new things. Our scientific accomplishments have been portrayed in part by 150 original published articles from 172 authors. We know scientific value, accomplishment, and a recording of our progressively increasing knowledge has been well worth while and will rank in intrinsic value with any group of dedicated, ambitious and competent medical men. The primary objective for our becoming and continuing to be doctors of medicine is the belief that with our knowledge, our skill and our willingness, we are able to improve the health conditions of our patients.

It is not given to every doctor of medicine to do research work and develop new programs or philosophies or search out new disease entities. We have such men in Michigan who are doing just that—even to the point of discovering new diseases or new treatment for them. Our fair share of that type of endeavor has been recorded during the year. That is enough about the purely scientific aspects of our professional work. We have recorded as much as we could in the limited space available.

There is a socio-economic part of the medical program and medical practice. This is invested in our various committees who are working for the benefit of our patients as well as ourselves, looking to the improvement of programs, processes and methods and availability of services. We have more than 700 committee members doing this work as an extra volunteer service outside of their working hours and caring for the sick and injured. The tremendous work of the Michigan State Medical Society and its members could not be accomplished without such volunteer service, which in many instances takes the man away from his work, not just for hours but days upon days.

There is another function of the medical profession, especially through its leaders, but basically and fundamentally by its every member, and that task is to make provision politically or otherwise, so that our less fortunate—but just as deserving—people of low income may receive just as attentive and just as valuable service as the fortunate who can and do pay for their services. Michigan and the whole nation went through such a period of stress during the great depression of the 1930's. Nearly 70 per cent of our present





active doctors know that period only by historic reading. For about ten years following the stock market crash of 1929, the income of our people was unbelievably low. A tremendous percentage could get only "made work" with stipulated minimum income. We had medical pioneers who recognized the fact that here was another duty we owed to our patients, to make provision by which they could get medical and hospital care. Ten years were devoted into developing what became the Blue Cross-Blue Shield programs. The methods were trial and error and taking chances, but seeing to it that destitute or nearly destitute people did get hospital and medical benefits.

During this same period, the Federal Government sent administrators to each county to supervise direct relief programs. The federal Congress began toying with a "national compulsory health insurance" program. The medical profession opposed the socialized medicine plan and developed a counter measure, our voluntary prepayment programs. Thus was staved off the federal compulsory program, but a federal social security program was started and has been expanded by almost every Congress.

The fundamental social security idea was for employed people to pay a percentage tax in conjunction with their employers, assessed against their gross income up to a limit. The scheme was said to build an "insurance fund" which would pay monthly benefits upon retirement. The amount to be received was small and became increasingly smaller as the purchasing value of the dollar began to depreciate.

Older people, upon retirement, have become an increasing problem. Almost all the Blue Shield programs and Blue Cross programs provided, in their group services, to cover people of all ages in the groups as long as they were working. About five years ago, a new concept was established, by which older or retired people could continue their insurance by direct pay or other means. Then followed the development of special contracts for senior citizen benefits. This matter also became a political and a labor item to see who could offer the most benefits. The medical profession assisted in the passage of the Kerr-Mills Bill through Congress to take care of those over age, those with inadequate income, and relief groups, and to provide for their care through regular taxation through state, county and federal government.

Bureaucrats and politicians—too many of them—conceived the idea of putting all of these retired people under social security and paying their hospital costs out of that so-called "reserve." The Kerr-Mills bill passed and, if permitted, is in successful operation throughout the country. The bureaucrats, the politicians, the irresponsible promisers favor the King-Anderson Bill which would place all retired people, no matter what their income, under social security benefits to receive health services, hospital services, rather than the customary monetary benefits, as the social security measure.

The whole program has been misrepresented, the people have been misinformed. They have been told this new addition to social security is insurance. It is not. It is a tax on those who are working. The group of 16 to 20 million over sixty-five would be included in this service program, but would not have paid one cent for it. That bill did not pass Congress, but the world has been put on notice that the bill will be pushed and probably passed in the coming session. If we wish to continue the private practice of medicine without dominating dictates from bureaucratism, our membership must be ready to fight again. This time it's "for keeps"!

## The Blue Shield Program

The National Blue Shield held its annual program conference in Chicago, October 23-24. Problems of service, legislation, administration and eventualities were thoroughly discussed. Two whole days were devoted to an analysis and programming of what can and must be done. Speaking on the topic "This Choice Is Ours," Roger Fleming, director of the Washington office of the American Farm Bureau Federation, recalled Paul Revere and offered a new slogan "the federals are coming."

Another accomplishment from Michigan during this year has been the finalizing of the University of Michigan (McNerney) study of hospital and medical services. This is the culmination of five years of adverse medical publicity. The Governor's Commission, appointed by Governor Williams, set up a study to learn about hospital costs and medical costs and how they could be improved and reduced in amount. This committee worked three years; the Governor's commission by then had been disbanded and had to be reconstituted to receive the committee report. This report is about 1600 pages and has received a tremendous amount of national publicity, although it is not yet printed. It was presented to the Governor's commission, to the Governor, to a special legislative committee, to the Michigan State Medical Society, to the Michigan Hospital Association, to Michigan Medical Service, and to Michigan Hospital Service.

Special study committees of the Michigan State Medical Society, Blue Shield and Blue Cross are making detailed studies, outlining this report, condensing it and making its facts available. A special committee from the Legislature is also studying it.

During the past months, we have commented on some of the proposals and recommendations and reports. There are some items with which we cannot agree. The report recommends legislative change in our Blue Shield enabling act, with the elimination of all doctors of medicine from the Blue Shield Board and of all active hospital administrators from the Blue Cross Board. This would place us back thirty years when we were waiting for and begging insurance companies to develop a program of medical service. Insurance experts refused to do this because "medical services were uninsurable." It took the dedicated, hard-working, far-seeing doctors of medicine to recognize this depression activated need and to provide for a new industry. With the suggested lay board, we would have just another insurance company which would have learned that medical services can be insured but would have no sympathy with the medical profession and its inate problems in rendering the best service to the greatest number of people who need it.

Mr. McNerney also suggested that the medical men on the Board be self perpetuating. When Blue Shield was started in Michigan, the Council of the Michigan State Medical Society was the group which had done the years of research, the detail work and the organizational work. Naturally, they carried on in good proportion as the medical men on the original board. They could not be and have not been self-perpetuating because the corporate body of Blue Shield, which does the electing, is the seated House of Delegates plus the members of the board who are not members of the House of Delegates. Through the years, The Council members of the board have gradually diminished. Last year, there was only one member of the board who was also a Council member, and only five who had ever been Council members. The present Board for 1961-62 has no members of The Council and only three who have ever served on The Council. That disproves a self-perpetuating suggestion but brings up another item of concern. Michigan Medical Service, our Blue Shield, is a practically indispensable public fiduciary corporation, primarily for the benefit of our subscribers, assuring them services on a prepaid basis. It is a service guaranteed by the medical profession. Therefore, medical doctors, directors, are necessary to insure that subscribers get that service.

This corporation is expending for the benefit of its subscribers almost 100 million dollars a year. That is big business. We believe any corporation handling that amount of money, and responsible for the necessary business problems, would be very much concerned if its corporate body which has that responsibility, was prohibited from re-electing experienced directors for the Board of Trustees.

Our new president, Sidney Adler, in his acceptance speech, cautioned the board members that they were accepting great responsibilities to themselves, to their patients and to the public in assuming the responsibility of guidance of such an all-inclusive and all-important business. He promised to do his utmost to streamline the business agenda so it could be properly and efficiently handled. He would expect each and every member of the Board to take over and do without stint the tasks which may be and would be assigned.

## Legislative Programs

In Michigan, we must be concerned as to what changes are made in the enabling act under which Blue Shield is operating. There is a strong influence being exerted through the McNerney report and from the Insurance Commissioner and others, to cut down the number of doctors on our Board and to take over our directing of Michigan's voluntary prepayment program. Such pressure also comes from Washington for the take-over by social security.

# Charity Giving

A report just issued from the University of Michigan Research Center states that the American people give to charity, churches, and other welfare agencies some 17 billions of dollars a year or about 4 to 6 per cent of their income. The U. S. Census Bureau reports an income total in the United States for 1960 of $400,-200,000,000 and for 1961 was estimated at $414,650,-000,000. In the state of Michigan, the income for 1960 was $18,225,000,000 and in 1961 was estimated at $18,230,000,000. That amount, broken down into per capita income, represents, in 1960, $2,322 per individual person in Michigan, and for the whole United States, $2,223. The U. S. Census Bureau reports that the typical American family consists of father, mother and two children, living on an income of $5,600 in 1960. Thirty-one per cent of all American families are in the $7,000 to $15,000 income bracket. Only 8 per cent were in that bracket ten years ago.

This is the season of the year when we all clear up our affairs, balance our accounts and obligations and prepare for a new season. This includes many things we could do such as buying Christmas seals, making donations to our medical schools directly or through the American Medical Education Foundation.

We have passed through the United Fund solicitation period, Community Chest, Torch Drive, Red Feather or the solicitation of 20 to 200 independent organizations. Did each of us do his fair share? Sometimes these united solicitation groups contain one organization or one group which we personally do not approve and do not wish to support. Such questions occur in all solicitations. These objectors have generally been informed they could make their donation to the general fund specifying that no part of it go to that particular group which they disapprove, but they will have supported the many groups which they do approve.

Have you forgotten any? It is not too late.

## Known as "The Health City"

This issue of THE JOURNAL MSMS, dedicated to the Calhoun County Medical Society, would not seem complete without a mention of the health-food industry in Battle Creek. Medicine, in its practice and extended benefits to patients, sparked an entirely new industry—packaged breakfast foods. It is likely that more United States residents know Battle Creek for its cereal industry than for any other product or activity.

The early beginnings of the Kellogg Company and the Post Division of General Foods go back almost 100 years. It was in the period of 1866 to 1891 that the companies formed to market health foods.

Today, there are four health food companies of national importance in Battle Creek—Kellogg's, Post, Ralston-Purina and National Biscuit Company. It is estimated these four firms employ 6,000 persons.

Calhoun County, with its 138,000 population, also is known for several other major industries. These would include the insurance industry and the firms that manufacture automotive parts, material-handling equipment and paper products.

The area is blessed with the education-cultural activities of the Kellogg Junior College and the Kingman Museum.

The Hospital Service Plan of Battle Creek is a unique organization tied in with the health program. Battle Creek has been active in United Fund giving, starting with the Welfare Funds of the early 1920's, Community Chest, and others. Ten years ago, the Board became convinced that some of the purely welfare funds supposed to pay indigent hospital costs could be better used. The Board created the Hospital Service Fund with instruction to confer with hospitals and doctors to find help for such needs. The worker has found hundreds of sources of help from unions, churches, relatives, fraternities, and numerous quasi-public agencies that could pay parts of these costs. The agency has no relief funds, but the first year produced over $15,000 for one hospital. The agency makes hundreds of investigations each month and has become indispensable.


Battle Creek has been serving, too, as national headquarters for the federal civic defense program.

National recognition also comes to the community because of the Kellogg Foundation, which has financed and encouraged research and undertakings in the areas of health, education and civic betterment.

Battle Creek and Calhoun County Medical Society played a very important part in the original research and plan development which led to the creation of Blue Shield.

## Thank You

We give our thanks to A. Hamady, M.D., and his committee for cooperating in selecting original articles and securing some pictures for this issue. We also thank the *Battle Creek Evening News* for the use of some rare historic pictures, which were furnished by E. F. Jones, M.D., of the Veterans Hospital.

# New Trial Ordered

An intermediate appellate court in California recently held that a damage suit against a physician, charging that his negligence during delivery had caused brain damage to an infant, should have been submitted to the jury. The court held that a nonsuit was improperly granted.

The mother testified that she had been taken into the delivery room although a nurse had reported that the cervix of the uterus had not been completely dilated. She said that the attending physician, and at his direction, two nurses and an anesthetist had pushed down on her stomach vigorously. A pediatrician testified that he had examined the child shortly after its birth and found it to be suffering cephalhematoma (a separation of the membrane covering the skull from the skull proper). He said that this was not a congenital anomaly, but was due to pressure upon the skull during delivery. An osteopath testified that the mother's pelvis was normal and that it was his opinion that the brain damage was caused by the pressure exerted on the mother's abdomen during delivery.

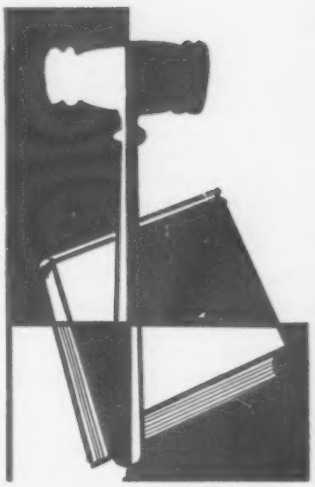
The attending physician testified that he had noticed no abnormalities of the mother that might contribute to an abnormal birth, that there was no evidence of injury to the mother during the pregnancy, that it was good practice to force a child out by pressure on the abdomen, and that if a crushing type of injury were great enough it could squeeze the brain and cause the condition from which the child was suffering.

The appellate court held that a nonsuit should not have been granted by the trial court. It said that nonsuit should be denied if there is any substantial evidence which, with the aid of all legitimate inferences favorable to the plaintiff, tends to establish the averments of the complaint. The case remanded to the trial court for a new trial.—Libby v. Conway, 13 Cal. Reptr. 830 (Cal., June 12, 1961)

* * *

## Illinois Medical Witness Panel Fees

The previous report in *The Citation*, that the Illinois Medical Witness Panel Plan will be paid by the Illinois State Medical Society was in error. The experts' fees will be paid from funds which must come from a nonpartisan foundation which is national in scope and unimpeachable in character, in order to minimize any possible criticism.



LEGAL OPINION 1559

# Editorial Comment

## Why Doctors Leave Home

*Grand Rapids Press,* Oct. 15, 1961.

In his speech before the Kent County Medical Society last week, Charles R. Sligh, Jr., cited a report in the *London Economist* to the effect that "bright young English students with an aptitude for medicine were more and more deciding to enter the veterinary schools." They are becoming veterinarians to "escape the red tape and frustrations" of Britain's system of socialized medicine.

This is precisely the point that E. Lloyd Dawe, British surgeon and psychiatrist now practicing in this country, made recently in an article in the Nation's Business. "Practice under the National Health Service," he disclosed, "soon became intolerable for me, as it has for thousands of British and European doctors who have left their countries to practice in America."

The story Dr. Dawe has to tell must seem incredible to anyone ignorant of the way socialized medicine works. For example, only doctors on the staffs of hospitals may prescribe new drugs. Doctors who prescribe for their patients drugs not on the government-approved list are fined. Hospitals are woefully overcrowded—quite possibly because socialized medicine encourages everyone to seek hospital care—and patients have no choice to which hospital they will be assigned. British hospitals are jammed with elderly patients whose relatives find it easier to send them to hospitals than to look after them at home. Meanwhile, cases in dire need of hospital treatment can't gain admission—Dr. Dawe cites the case of several young patients with acute tonsilitis who were on the waiting list for a year.

The mass impersonal treatment of the sick obviously has some self-frustrating features. Much is made of the fact that the British do have a choice in selecting their family physician, but it's a poor choice because the average general practitioner has very little time for anyone. To earn as much as $4,000 a year, says Dr. Dawe, a physician in general practice, operating under the government's fixed-fee system, has to see 100 patients a day—which hardly gives him time enough to slip each patient a packet of aspirin and show him to the door. One of Dr. Dawe's colleagues made a decent living by raising chickens on the side. His chicken farm paid him more than his medical practice.

Yet the cost of Britain's National Health Service has increased fivefold. Obviously the doctors aren't getting the money. It's the clerks—there are two to three for each doctor in the system—who must keep the red tape tightly wound.

Small wonder, then, that medically-talented young Britons are "going to the dogs" to make a living. Sligh's comment, that if things stay on this course in Britain one will have to pretend to be a Pekingese to get the best treatment, probably wouldn't appear funny to the British. They have to live with socialized medicine. We don't. We can keep it out—though only if we continue to oppose such medical care legislation as that introduced in the last Congress. To be sure, there were strong denials of any attempt to regulate doctors. But the bill provided for the foot in the door. It stipulated that hospitals, nursing facilities and home care units would have to meet such requirements to participate as the secretary of health, education and welfare might provide. There comes that army of clerks with its forms, fines and flyspecking.

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## State Medical Journal Conference

The 1961 Conference of Editors of State Medical Journals was held in Chicago at the Sheraton-Chicago Hotel, October 30-31, 1961. Two full days and one evening involving talks and discussion, with analyses of all state medical journals. Theodore Wiprud, Managing Editor, *Medical Annals of District of Columbia,* presided. There were talks by Theodore R. Van Dellen, M.D., Medical Editor, *Illinois Medical Journal;* John H. Talbott, M.D., Editor, *Journal of the American Medical Association,* and Morris Fishbein, M.D., former Editor, *Journal of the American Medical Association.*


Doctor Haughey receives certificate for distinguished service.

Panels and other discussions were presented by Theodore Wiprud, Managing Editor, *Medical Annals of the District of Columbia;* Wallace M. Yater, M.D., Editor, *Medical Annals of the District of Columbia;* Joseph Garland, M.D., Editor, *New England Journal of Medicine;* Edgar Woody, Jr., M.D., Editor, *Journal of the Medical Association of Georgia;* Harvey T. Sethman, Managing Editor, *Rocky Mountain Medical Journal;* James A. Waggener, Business Manager, *Journal of the Indiana State Medical Association,* and Jerome Enright, Business Manager, *Minnesota Medicine.*

O. M. Forkert again gave an evaluation of the format of the state medical journals. He made a critical analysis of each one of the thirty-four, studying them from seventeen lines of approach. Each editor received a critical analysis for his journal. Michigan was graded 83.

Monday evening, at the banquet, Wilfrid Haughey, M.D., Editor, THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, was given a certificate for distinguished service, presented by Walter E. Vest, M.D., Editor, *West Virginia Medical Journal.* Theodore Wiprud presided.

The Weeders, Van Gogh, Bernard Koehler Collection, Berlin

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**Supplied:** Bottles of 60 scored tablets.

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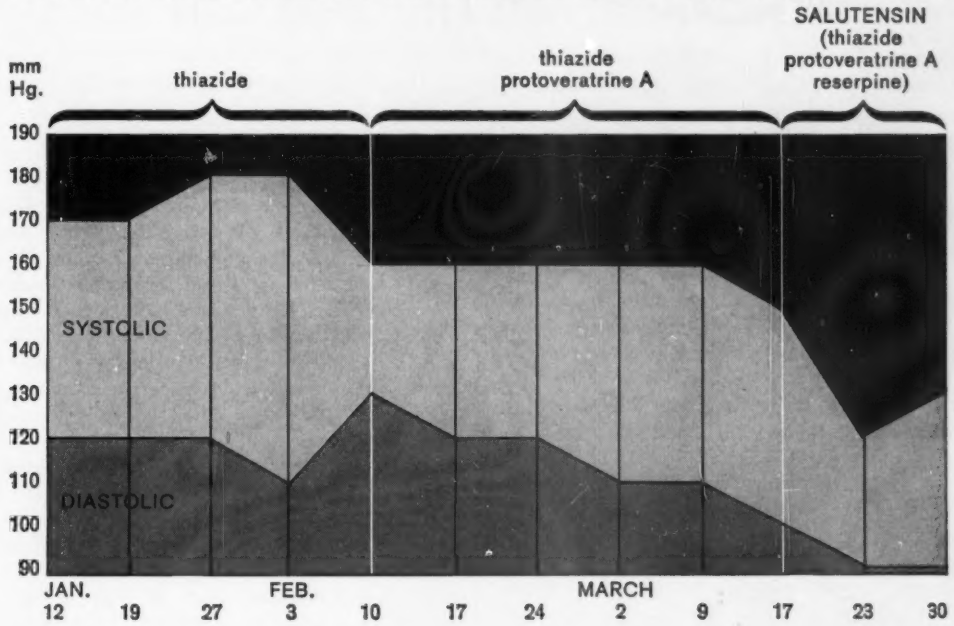
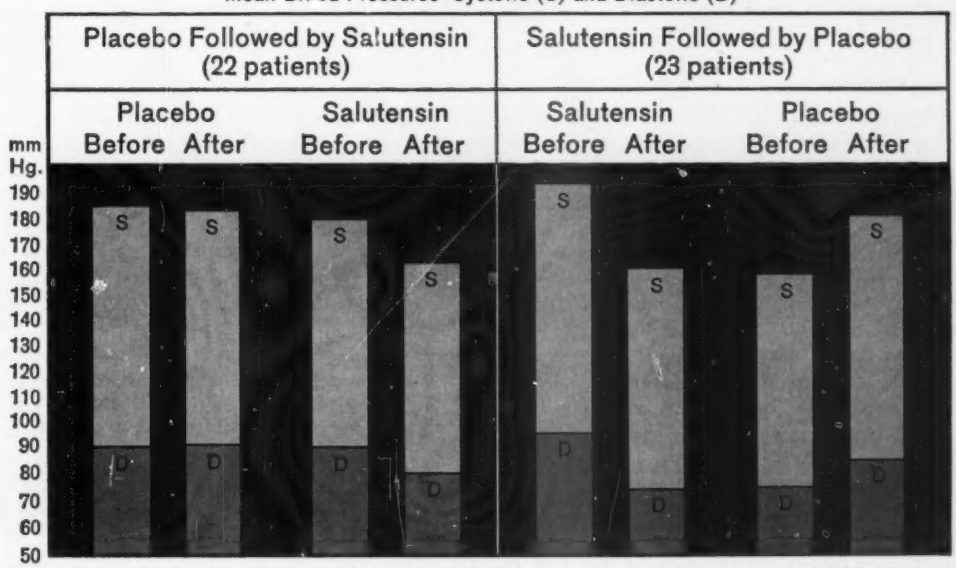
**11 WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS BY SERIAL ADDITION OF THE INGREDIENTS IN SALUTENSIN IN A TEST CASE**

(Adapted from Spiotta, E. J.: Report to Department of Clinical Investigation, Bristol Laboratories)




**3½ WEEKS TO LOWER BLOOD PRESSURE TO DESIRED LEVELS USING SALUTENSIN FROM THE START OF THERAPY IN A "DOUBLE BLIND" CROSSOVER STUDY**

Mean Blood Pressures–Systolic (S) and Diastolic (D)




In this "double blind" crossover study of 45 patients, the mean systolic and diastolic blood pressures were essentially unchanged or rose during placebo administration, and decreased markedly during the 25 days of Salutensin therapy. (Smith, C. W.: Report to Department of Clinical Investigation, Bristol Laboratories.)

BRISTOL LABORATORIES / Div. of Bristol-Myers Co., Syracuse, N.Y.

# MICHIGAN DEPARTMENT OF HEALTH

ALBERT E. HEUSTIS M.D., State Health Commissioner

## Policy on Polio Vaccine

The Michigan Department of Health recommends that, for the present, the licensed oral poliomyelitis vaccine be used only in mass community programs in the event of an outbreak on a type specific basis and that all physicians and health officers continue to use and promote the use of Salk-type vaccine in the four-dose schedule, with a fifth dose five years after the fourth as the poliomyelitis immunizing agent of choice.

The Salk-type licensed vaccines are highly effective against all three types of poliomyelitis and are demonstrably safe. This is backed by tremendous protocol.

The oral vaccines now licensed are not complete. Type three is not yet licensed, and the Public Health Service indicates there are no immediate prospects of its being licensed. Oral vaccine requires multiple doses, as does the Salk-type vaccine. While it is judged safe and effective within the limits of present knowledge and by standards and tests now available, the accuracy of these tests is still open to controversy. The final proof may come only after extensive field use.

## Tri-State Congenital Malformations Study

*(Sponsored in Michigan by the Michigan Department of Health)*

Medicine has made phenomenal progress in the treatment of congenital malformations. Functional correction of the club foot or the cleft palate is now taken for granted, and surgery of the congenital heart—undreamed of a quarter of a century ago—is a relatively common procedure in medical centers today. Although we have made gains in the surgical correction of some anomalies, in excess of 1 per cent of infants born in our hospitals are found to have observable malformations at birth. Most of these, fortunately, are minor; but some are so severe as to threaten life, or limit the individual's sense of well being and his usefulness to society.

We have made progress in our understanding of the mechanisms underlying these anomalies. Further progress will be largely dependent upon the efforts we are able to put into basic research. Radiation represents one of the recognized factors in these occurrences. Radiation can be man-made, or it can come from natural sources, such as the background radiation from rocks. Some correlation between the differing amounts of background radiation in communities and the occurrence of congenital defects has been observed; however, these observations are inconclusive.

The States of Michigan, Colorado and Minnesota are cooperating in a study which is being sponsored by the Division of Radiological Health of the Public Health Service. In this study, an attempt will be made to relate directly measured background radiation levels to the incidence of congenital malformations. This is a preliminary study to determine the feasibility and desirability of conducting a more definitive study. For this purpose, twenty-four urban areas in Michigan have been selected. Records of births and fetal deaths occurring to residents of each of the selected areas for the years 1958 and 1959 are being examined. Data from each of these records relating to the occurrence or non-occurrence of congenital malformations are placed on an individual worksheet for each birth.

In order to make the study as accurate as possible, it is important to obtain any additional information which may be on the hospital records of these births. Therefore, each of the designated birth records is to be examined in these hospitals to complete the individual worksheet for each birth. If death occurred during the first year of life, the related hospital records of that death are to be examined later for any further evidence of a malformation which may have been present. Any other conditions, treatment or data on hospital practices is not desired. The examination of the hospital records is being done in the hospitals concerned by senior medical students of the University of Michigan as part of their medical training. This, it is hoped, will be completed by April, 1962.

The completed worksheets go to the University of Minnesota where the data will be entered on IBM cards. Composite data on the occurrence of defects will be made available to the participating hospitals when compiled.

*(Continued on Page 1568)*

## in bacterial tracheobronchitis

# Panalba* promptly

## to gain precious therapeutic hours

**Panalba** your broad-spectrum antibiotic of **first** resort

**In the presence of bacterial infection, taking a culture to determine bacterial identity and sensitivity is desirable—but not always practical in terms of the time and facilities available.**

**A rational clinical alternative is to launch therapy at once with Panalba, the antibiotic that provides the best odds for success.**

**Panalba is effective (in vitro) against 30 common pathogens, including the ubiquitous staph. Use of Panalba *from the outset* (even pending laboratory results) can gain precious hours of effective antibiotic treatment.**

**Supplied:** Capsules, each containing Panmycin* Phosphate (tetracycline phosphate complex), equivalent to 250 mg. tetracycline hydrochloride, and 125 mg. Albamycin,* as novobiocin sodium, in bottles of 16 and 100.

**Usual Adult Dosage:** 1 or 2 capsules 3 or 4 times a day.

**Side Effects:** Panmycin Phosphate has a very low order of toxicity comparable to that of the other tetracyclines and is well tolerated clinically. Side reactions to therapeutic use in patients are infrequent and consist principally of mild nausea and abdominal cramps.

Albamycin also has a relatively low order of toxicity. In a certain few patients, a yellow pigment has been found in the plasma. This pigment, apparently, a metabolic by-product of the drug, is not necessarily associated with abnormal liver function tests or liver enlargement.

Urticaria and maculopapular dermatitis, a few cases of leukopenia and thrombocytopenia have been reported in patients treated with Albamycin. These side effects usually disappear upon discontinuance of the drug.

**Caution:** Since the use of any antibiotic may result in overgrowth of nonsusceptible organisms, constant observation of the patient is essential. If new infections appear during therapy, appropriate measures should be taken.

Total and differential blood counts should be made routinely during prolonged administration of Albamycin. The possibility of liver damage should be considered if a yellow pigment, a metabolic by-product of Albamycin, appears in the plasma. Panalba should be discontinued if allergic reactions that are not readily controlled by antihistaminic agents develop.

*Trademark, Reg. U.S. Pat. Off.

The Upjohn Company
Kalamazoo, Michigan

Upjohn
75th year

# Calms the Tense, Nervous Patient

## in anxiety and depression

The outstanding effectiveness and safety with which Miltown calms tension and nervousness has been clinically authenticated by thousands of physicians during the past six years. This, undoubtedly, is one reason why meprobamate is still the most widely prescribed tranquilizer in the world.

Its response is predictable. It will not produce unpleasant surprises for either the patient or the physician. Small wonder that many physicians have awarded Miltown the status of a proven, dependable friend.

**Miltown®**
meprobamate (Wallace)

***Usual dosage:*** One or two 400 mg. tablets t.i.d.
***Supplied:*** 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50. Also as MEPROTABS®—400 mg. *unmarked*, coated tablets; and in *sustained-release* capsules as MEPROSPAN®-400 and MEPROSPAN®-200 (containing respectively 400 mg. and 200 mg. meprobamate).

WALLACE LABORATORIES
*Cranbury, N. J.*

Clinically proven in over 750 published studies

1 Acts dependably – without causing ataxia or altering sexual function

2 Does not produce Parkinson-like symptoms, liver damage or agranulocytosis

3 Does not muddle the mind or affect normal behavior

# Cooperation Urged In Common Struggle

The "Right of Free Choice" was stressed by Francis C. Brown, president of the Schering Corporation at the recent 63rd annual convention of the National Association of Retail Druggists in Miami Beach. In part, Mr. Brown said:

"We must not permit ourselves the comforting illusion of striving to save freedom abroad while we allow it to be destroyed by default at home.

"Unfortunately, through complacency, indifference, and ignorance, the erosion of liberty within our borders has increased its tempo in recent years.

"The three fundamental elements of medicine in this country—the physician, the pharmacist, and the pharmaceutical manufacturer—have worked together in a climate invigorated by the spirit of freedom, and together they have provided medical care unsurpassed anywhere in the world. In these troubled days, we must be ever alert to preserve our freedom at home, to live according to our fundamental beliefs, and to accept the dangers and the responsibilities of economic and political democracy."

# More than 75,000 Work in Michigan Hospitals

The hospital industry in Michigan is among the ten largest employers in the state. It is estimated that in 1960, about 76,000 persons worked full-time or part-time in the 246 Michigan hospitals which reported employment statistics. Together, these hospitals employed over 3 per cent of the state's total wage and salary workers.

More than 1,600,000 full-time and part-time personnel were employed in approximately 6,900 hospitals in the United States in 1960. This figure represents 2.6 per cent of total employment in nonagricultural establishments last year. Hospitals employ more workers than do such industries as basic steel, automobiles, electrical machinery or interstate railroads.

# National Leader

Miss Adelia M. Beeuwkes, Ann Arbor, is the new president of the American Dietetic Association. Miss Beeuwkes, widely recognized as an educator in the field of nutrition, received a bachelor of science degree at Michigan State University, her master's degree at the University of Michigan, and completed her dietetic internship at the University of Michigan Medical Center.

# Southeastern Michigan Cancer Division Re-Elects Dr. Nelson

The Southeastern Michigan Division of the American Cancer Society has re-elected Harry M. Nelson, M.D., Detroit, president, and John R. McDonald, M.D., Detroit, vice president.

Newly elected as chairman of the board was Arthur J. Vorwald, M.D., Detroit.

Among those elected to membership on the Board of Directors was Alan Thal, M.D., Detroit.

# Doctor Adler, New President of Michigan Blue Shield

Sidney Adler, M.D., Detroit, is president of Michigan Blue Shield, elected at the October Board meeting. He succeeds G. Thomas McKean, M.D., Detroit, who served as president for two terms but declined renomination because of the press of his medical practice.

Others newly elected were James Blodgett, M.D., Detroit, and James M. Gillen, General Motors Corporation, as vice presidents. Also elected for the first time as secretary was Allan K. Cameron, M.D., Saginaw.

Waldo I. Stoddard, Michigan National Bank, Grand Rapids, was re-elected treasurer for his sixth term.

The Board of Directors re-elected Sumner G. Whittier executive director and also named him assistant treasurer. Neal McCue, administrative assistant, was named assistant secretary.

Doctor Adler, in his acceptance speech, emphasized his appreciation that much and exacting work must be done to reverse the trend and make Michigan Medical Service a continuing and growing organization offering to its subscribers every benefit they may expect including the constant effort among the doctors to have happy and contented subscribers and to increase the popularity of Michigan Medical Service in Michigan. He promised to devote every effort to further streamlining and preparing materials for the board meetings. He said he will expect all doctors on the board to serve on the Medical Advisory Committee.

At the annual organization meeting, the first order of business was the introduction of new members of the board—F. E. Alfenito, M.D., Grand Rapids, was unable to be present; E. C. Baumgarten, M.D., Grosse Pointe Woods, who was a member previously; Robert M. Bookmyer, M.D., Birmingham; Hugh Caumartin, M.D., Saginaw; Alfred H. Whittaker, M.D., Detroit (all of whom represent the Michigan State Medical Society); Ralph C. Hutchins, Alma, representing Michigan Hospital Association, and Rt. Rev. Robert L. DeWitt of Detroit, representing the public.

In the financial report as of August 31, it was brought out that Michigan Medical Service has paid out for services to its beneficiaries, $511,963,231. (The first and only Blue Shield to go over the half billion mark.) Michigan Medical Service is now paying out for benefits in excess of $7.5 million a month.

# UM High in Number of MD Graduates

A relatively small number of colleges and universities prepare the great majority of entering medical students.

The Association of American Medical Colleges has published a list of the top 25 schools for each two-year period—1952, 1954, 1957, 1958 and 1960. Harvard ranks first in each group: 169, 174, 162, 182, and 164. Michigan ranks second in every year but 1956, when it was third. The students were 55, 136, 145, 164, and 145. In 1956, Illinois was second with 151. Wayne State University gets into the listing for 1958 and 1960 with 74 and 69 students.

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## TRI-STATE CONGENITAL MALFORMATIONS STUDY

*(Continued from Page 1564)*

Information obtained from individual records is completely confidential and for research purposes only. This is assured by Act 39 of the Public Acts of 1957 of the State of Michigan. The project has been approved by the State Council of Health.

With the completion of the vital records and hospital parts of the study, exact measurements will be made of the background radiation levels in each of the selected areas. This will be correlated with the data on malformations from those areas for significant differences and relationships.

The study concerns only births during 1958-59 within the city limits of the following cities: Adrian, Albion, Alpena, Benton Harbor, Big Rapids, Charlotte, Grand Haven, Holland, Iron Mountain, Ishpeming, Jackson, Kingsford, Lapeer, Marquette, Mason, Midland, Mt. Pleasant, Petoskey, Romeo, Sault Ste. Marie, South Haven, Tecumseh, Three Rivers, and Traverse City.

# Brief and to the Point

**NATIONAL LEADER**—Albert D. Ruedemann, M.D., Detroit is the new president-elect of the American Academy of Ophthalmology and Otolaryngology. He will assume the presidency in January 1963. Members elected Dr. Ruedemann recently at their 66th annual session in Chicago. In order to accept the presidency, Dr. Ruedemann resigned the post he has held for 28 years as secretary for instruction in ophthalmology of the Academy of Ophthalmology.

* * *

**APPOINTED**—Dr. Henry F. Vaughan, Ann Arbor, is a member of the new citizens advisory committee to the U. S. Food and Drug Administration. He was appointed by HEW Secretary Ribicoff. The committee will make recommendations regarding the steps which the Department and the Food and Drug Administration should take to insure adequate protection to citizens in their use of foods, drugs, therapeutic devices, cosmetics and laws enforced by the FDA.

* * *

**REPORT DIABETES EFFORT**—More than 200 Michigan physicians participated in the 1960 Diabetes Detection Drive, reporting 3,532 persons tested, 101 positive tests and 29 new diabetics found as a result. In addition, 52 new and 32 potential diabetics were found as a result of Dreypak test kit screening and 168 new diabetics were discovered through Clinitron blood sugar screening programs. Altogether 40,101 persons were tested and 249 new diabetics found.

* * *

**POPULAR EVENT**—The Medical Career Day held recently at the University of Michigan had the largest turnout of any previous career conference. One hundred seventy-five students from various Michigan and from a few out of state colleges attended. Michigan schools represented were Albion College, Aquinas College, Calvin College, Flint Junior College, Hillsdale College, Hope College, Michigan State University, University of Detroit, the University of Michigan, and Wayne State University. Dean William N. Hubbard and many faculty members participated on the program.

* * *

**HOLD WORKSHOP**—Hospital administrators, doctors, nurses and safety experts attended the recent University of Michigan workshop on problems of patient safety in hospitals. Sessions were conducted by George H. Lowrey, M.D., Frank W. Reynolds, M.D., Paul E. Hodgson, M.D., and Carey McCord, M.D., all of Ann Arbor.

* * *

**OFFER ENCOURAGEMENT**—More than 100 resident physicians and interns in teaching hospitals received financial assistance from the George W. Merck Memorial Loan Fund in its second year of operation. Nineteen medical schools participated in the Fund, established "to encourage deserving interns and residents to seek the best possible

post-graduate training by providing loan funds that will supplement the stipends available to them at teaching hospitals." Seventy per cent of the loans went to residents.

* * *

**ON GERONTOLOGICAL BOARD**—V. K. Volk, M.D., Saginaw, is a member of the board of directors for the Michigan Gerontological Society. Frederick Swartz, M.D., Lansing, past-president, also serves on the board for the coming year.

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**WAYNE SYMPOSIUM**—A two-day Symposium on Rheumatology and Metabolism was held recently at the Wayne County Medical Society building, the event sponsored by Wayne State University's College of Medicine.

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**FELLOWSHIPS EXTENDED**—Contribution to international medicine and American medical education has prompted Smith, Kline & French Laboratories to extend its foreign fellowship program, administered by the AAMC, for one extra year. Originally set up on a three-year basis, the program is going into what would have been its final year of offering fellowships to junior and senior medical students for medical work and study in underdeveloped areas of the world.

* * *

**STUDENT HELP**—The Association of American Medical College has published a 197-page book listing sources of financial assistance available from universities and other agencies for graduate study in the medical sciences. The publication lists over 1,000 fellowships, scholarships, traineeships and awards covering more than 100 specialties.

* * *

**ON TOUR**—C. Paul Hodgkinson, M.D., Lathrup Village, immediate past president of the American College of Obstetrics and Gynecology, is on a month-long tour of South America where he will deliver several scientific papers in Spanish.

* * *

**KELLOGG FELLOWSHIPS**—This academic year, 49 members of the health professions of Latin America will be in the United States for advanced study through fellowships awarded by the W. K. Kellogg Foundation of Battle Creek. Twenty-seven are physicians. Under this program, there are now six students at the University of Michigan and two at Wayne State—two taking medical nursing, one gastroenterology, two oral hygiene or diagnosis, two hospital administration and one clinic administration.

* * *

**MUSEUM OF HEALTH**—An American Museum of Health has been granted a charter as an educational institution by the University of the State of New York. A national advisory group of distinguished leaders in medicine, public health and related fields is being formed to assist in the development of the museum. The newly created institution will erect a $3,500,000 Hall of Medicine and Public Health at the World's Fair 1964-1965 in New York City.

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**OPENS OFFICE**—The Medical Library Association has opened headquarters in Chicago and appointed Helen Brown Schmidt as executive secretary. The new office is at 919 N. Michigan Avenue, Chicago.

**EXAMS SCHEDULED**—The American Board of Obstetrics and Gynecology announces that the next scheduled examination (Part II), oral and clinical, for all candidates, will be conducted at the Edgewater Beach Hotel, Chicago, April 9-14, 1962. Full details may be obtained from Robert L. Faulkner, M.D., board secretary, 2105 Adelbert Road, Cleveland.

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**WAYNE GRANT**—Wayne State University recently received a grant of $238,495 from the U. S. Public Health Service National Institute of Health to support research in the Wayne Neurological Center for Cerebrovascular Research, under the direction of John Stirling Meyer, M.D., Detroit.

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**NEW LOCATION**—For the first time, the University of Michigan held its annual "Cancer Retreat" this year at the Michigan State University conference center at Gull Lake, near Hickory Corners. Forty doctors and scientists participated.

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**TRAIAN LEUCUTIA, M.D.**, Detroit, was installed as president of the American Roentgen Ray Society at the annual meeting in Miami Beach. He succeeds Harold G. Reineke, M.D., of Cincinnati.

About 1,500 radiologists and guests registered to hear some 50 papers and attend 68 refresher courses.

**PROFESSIONAL HONORS**—G. B. Pierce, Jr., M.D., associate professor of pathology at The University of Michigan Medical Center, has been extended one of the top professional honors of the American Urological Association. Dr. Pierce has accepted an invitation to give the Guiteras Lecture, a memorial to the founder of the Association and termed "the outstanding scientific presentation" of the Association's 57th annual meeting in Philadelphia next May. The invitation to Dr. Pierce comes in recognition of his extensive research on the transplantation and growth of testicular tumors.

Reed Nesbit, M.D., professor of surgery and head of the University of Michigan urology section, was similarly honored by the Association two years ago.

Three University of Michigan graduates were honored in November for outstanding achievement in their chosen professions. They are: John B. Grant, M.D., of the School of Tropical Medicine, University of Puerto Rico, consultant to the Rockefeller Foundation; Dennis Flanagan of New York City, editor of *Scientific American* magazine; and Thor Johnson, orchestral director at Northwestern University and formerly conductor of the Cincinnati Symphony. All received Outstanding Achievement Awards consisting of a citation at a special convocation held as part of a joint concert of the Duke University and the University of Michigan Men's Glee Clubs.

## MEETINGS U.S.A.

### 1962

### January

American Academy of Orthopaedic Surgeons, Palmer House, Chicago, Jan. 27-Feb. 1. Mr. John K. Hart, 29 East Madison St., Room 910, Chicago 2, Executive Secretary.

### February

American Academy of Allergy, Denver-Hilton Hotel, Denver, Feb. 5-7. Mr. James O. Kelley, 756 North Milwaukee St., Milwaukee 2, Executive Secretary.

American Academy of Forensic Sciences, Drake Hotel, Chicago, Feb. 22-24. Dr. W. J. R. Camp, 1853 W. Polk St., Chicago 12, Secretary-Treasurer.

American Academy of Occupational Medicine, Pittsburgh, Pa., Feb. 7-9. Mr. William C. Stronach, 20 N. Wacker Dr., Chicago 6, Executive Director.

Central Surgical Association, Cincinnati, Feb. 22-24. Dr. Carl E. Lischer, 457 N. Kingshighway, St. Louis 8, Secretary.

Congress on Medical Education and Licensure, Palmer House, Chicago, Feb. 3-6. Dr. Walter S. Wiggins, 535 N. Dearborn St., Chicago 10, Director, AMA Council on Medical Education and Hospitals.

Society of University Surgeons, Cleveland, Feb. 8-10. Dr. C. Frederick Kittle, University of Kansas Medical Center, Kansas City 12.

Michigan Clinical Institute, Sheraton-Cadillac Hotel, Detroit, February 28, March 1-2.

### March

American College of Surgeons, Sectional Meeting, Sheraton-Cadillac Hotel, Detroit, March 5-7. Dr. William E. Adams, 40 E. Erie St., Chicago 11, Secretary.

American Pharmaceutical Association, Convention Center, Las Vegas, March 26-29.

### April

Aerospace Medical Association, Atlantic City, April 9-12. Dr. William J. Kennard, Washington National Airport, Washington 1, D. C., Executive Vice-President.

American Academy of General Practice, Las Vegas, Nev., April 6-13. Mr. Mac F. Cahal, Volker Blvd., at Brookside, Kansas City 12, Mo., Executive Director.

American Academy of Neurology, Statler-Hilton Hotel, New York City, April 23-28. Mr. Thomas D. Swedien, 4307 E. 50th St., Minneapolis 17, Executive Secretary.

American Academy of Pediatrics, spring meeting, Statler-Hilton, New York City, April 30-May 2. Dr. E. H. Christopherson, 1801 Hinman Ave., Evanston, Ill., Executive Director.

American Association of Railway Surgeons, Chicago, April 12-14.

American Association for Thoracic Surgery, Chase-Park Plaza Hotel, St. Louis, April 16-18. Dr. Henry T. Bahnson, Johns Hopkins Hospital, Baltimore 5, Secretary.

American College of Allergists, Hotel Radisson, Minneapolis, April 1-6. Dr. Maurice C. Barnes, 1310 Austin Ave., Waco, Texas.

American College of Obstetricians and Gynecologists, Palmer House, Chicago, April 2-5. Mr. Donald F. Richardson, 79 W. Monroe St., Chicago 3, Executive Secretary.

American College of Physicians, Bellevue-Stratford Hotel, Philadelphia 4, Executive Director.

American Proctologic Society, Deauville Hotel, Miami Beach, April 30-May 3. Dr. Norman D. Nigro, 7815 E. Jefferson Ave., Detroit 14, Secretary.

American Society of Internal Medicine, Benjamin Franklin Hotel, Philadelphia, April 6-8. Mr. G. Tod Bates, 350 Post St., San Francisco 8, Executive Director.

Industrial Medical Association, Pick-Congress Hotel, Chicago, April 10-12. Dr. Emmett B. Lamb, 23 East Ohio St., Indianapolis 4, Secretary.

# IN MEMORIAM

**JACQUES P. GRAY, M.D.,** sixty-one, Detroit, director of special medical services for Parke, Davis & Company, died October 13, 1961.

Doctor Gray was director of the Hillsdale County Health Department, 1940-42; dean of the school of medicine and professor of public health medicine at the Medical College of Virginia, 1942-46, and at the University of Oklahoma School of Medicine in 1946-47, joining Parke-Davis later in 1947.

Doctor Gray was a 1928 graduate of Johns Hopkins University School of Medicine; in 1935, he received a doctor's degree in public health from Harvard University School of Public Health.

Memberships included the American Public Health Association and the American Association for the Advancement of Science. Active in the American Medical Writers Association, Doctor Gray coordinated the February, 1961 number of THE JOURNAL MSMS, which was dedicated to medical writing.

**AUSTIN Z. HOWARD, M.D.,** sixty, Detroit, Receiving Hospital's night superintendent since 1931 died October 1, 1961.

A graduate of Detroit College of Medicine, Doctor Howard joined the staff of Receiving Hospital as an intern in 1926 and later became the youngest man ever to hold the post of chief surgeon at the hospital. Total blindness, as a result of glaucoma, forced his retirement in April, 1961. He was on the staff of Detroit Memorial and Wayne County General Hospitals. He was an honorary member of the Detroit Police Officers Association and the Lieutenants and Sergeants Association.

**HENRY C. MORITZ, M.D.,** seventy-one, Detroit obstetrician, died October 25, 1961.

Doctor Moritz taught at Wayne State University College of Medicine. He was a charter member of the Michigan Gynecologic and Obstetric Society.

**THOMAS C. SMITH, M.D.,** sixty-eight, Kalamazoo psychiatrist, died October 19, 1961.

A native of Chicago, Doctor Smith was on the staff of Kalamazoo State Hospital since 1949.

**JAMES E. WATSON, SR., M.D.,** sixty-four, Detroit surgeon for 37 years, died September 27, 1961.

A graduate of Detroit College of Medicine and Surgery in 1921, Doctor Watson did postgraduate work at Mayo Clinic. Doctor Watson had been on the staff of Children's Hospital 25 years. A fellow of the American College of Surgeons, he was also on the staffs of Mt. Carmel Mercy and Wayne County General Hospitals.

**GEORGE E. WINTER, M.D.,** ninety-one, Jackson physician for more than fifty years, died September 20, 1961.

Doctor Winter had retired in 1954 and moved to Florida, where he was living at the time of his death. He was a graduate of the Detroit College of Medicine in 1895 and began practice in Jackson in 1901, specializing in ophthalmology and otolaryngology. He was a Life Member of the Michigan State Medical Society.

## Comforts Demanded

The average man today expects heat, light, water, gas and power at the turn of a switch. He expects trouble-free information and entertainment services—telephone, radio, television.

He expects comfortable and safe transportation in any weather on roads provided over mountains and across rivers.

The engineer plays a basic part in the development, construction and transportation of the multitude of products and services of modern life.

He is responsible for the conversion of energy to usable form and the transport of this energy to the consumer.

## Plastic Surgical Instruments

Plastic surgical instruments which could be used during a national emergency when metal is in short supply are currently being perfected at the Army Medical Service's Medical Equipment Development Laboratory, Fort Totten, New York.

Molded from polycarbonate resins, the instruments are light and durable, and can be manufactured by unskilled labor at low price. They can also be produced faster than metal instruments because of being made from one mold. At present, metal surgical instruments are produced by a comparatively small number of skilled, highly paid artisans.

# COMMUNICATIONS

*The Editor will be glad to receive and consider for publication letters containing information of general interest to physicians throughout the State or presenting constructive criticisms on controversial issues of the day.*

To Representatives of
Ingham County Medical Society and
Michigan State Medical Society:

We think the 1961 Michigan State University Career Carnival was the best, ever. We are prejudiced, of course, but we have come through thirteen career carnivals and it seemed that the displays were better this year, the recruiters more effective, and the students more enthusiastic.

Your own display was one of the attractions that brought the students in, not just the seniors, but also the underclassmen who wanted to know more about you and the field you represented.

From the Committee and myself, thanks to representatives of the Ingham County Medical Society and the Michigan Medical Society for contributing to the success of the Career Carnival.

Sincerely,
EDWIN B. FITZPATRICK
*Placement Bureau*
*Michigan State University*

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To The Council
Michigan State Medical Society:

Into the life of every man comes one event that mounts higher in stature, in satisfactions, in pleasure, and in memory than all other activities and actions of his years.

In my life, this great circumstance was my happy experience as President of the Michigan State Medical Society.

I cannot attain even the threshold of expression to recount the many joys that this assignment brought me. But one of the greatest dividends was association with members of The Council. Added to this is my indelible debt of gratitude to the members of this working body for their good advice which helped to keep my administrative feet on the right road.

My thanks, gentlemen, for your kindness and your friendship. The many trying tasks of the Presidency were made far less arduous and oft-times most pleasurable because of your constant guidance. Knowing that The Council was behind the President gave me the courage to carry on to the best of my ability, sometimes against discouraging odds.

I shall always be filled with humble gratitude to The Council for invaluable assistance afforded me during the past Society year.

Sincerely,
KENNETH H. JOHNSON, M.D.
*Immediate Past President*
*Michigan State Medical Society*

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To Every Michigan State Medical Society Member:

The present Michigan State Medical Society will be 100 years old June 5, 1965. Its history up to the year 1930 is told in the two-volume work entitled "Medical History of Michigan" which was compiled and edited by a committee with C. B. Burr, M.D., as Chairman, and published under the auspices of the Michigan State Medical Society.

This history was a tremendous job which could not be duplicated today. It is a valuable reference work and we feel that a short summary of the material in it relating to the earlier days of the Society should be part of our 100th Anniversary story.

We are asking you this question. Have you any material relating to the Michigan State Medical Society since the year 1930, such as newspaper or magazine clippings, letters, diaries, documents, pictures, or do you know of anyone who might possess this kind of material?

It may seem that 1965 is a long way off, but it takes time to go over the material, put it into shape, have it edited, and printed.

Will you help, if possible?

WILLIAM J. STAPLETON, JR., M.D.
*Historian, Michigan State Medical Society*

*(See also Page 1582)*

# The Doctor's Library

***Acknowledgments of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.***

BLOOD COAGULATION: COLLECTED PAPERS. By Walter H. Seegers and Associates, 1957-1960: W. J. Baker, G. Ballerini, R. K. Brown, G. Casillas, M. H. Cho, C. Fell, K. Fukutake, P. Halick, Y. Hatta, E. R. Hecht, J. F. Johnson, S. A. Johnson, R. H. Landaburu, J. M. Lee, W. G. Levine, E. F. Mammen, K. D. Miller, W. H. Seegers, R. S. Shepard, S. Shulman, D. F. Steichele, W. R. Thomas, M. Yoshinari.

Walter H. Seegers, of Detroit, and his associates present a paper bound volume, in which he has collected forty abstracts or publications on blood coagulations and his collected papers. He also has a listing of more than 130 publications. We are very happy to receive it and congratulate him most sincerely on an extremely well executed job. The book is complimentary.

PHARMACOGNOSY. By Edward P. Claus, Ph.D., Dean and Professor of Pharmacognosy, Ferris Institute School of Pharmacy; formerly Professor of Pharmacognosy and Head of Department, University of Pittsburgh School of Pharmacy; Member of Advisory Panel on Pharmacognosy, National Formulary. Fourth edition, thoroughly revised. 227 illustrations; 1 plate in color. Philadelphia: Lea & Febiger, 1961. Price, $12.50.

Pharmacognosy, we assume, is a manufactured term to designate everything one can about pharmaceutical preparations and other things used in the treatment of disease, knowing the intimate details and action and recognizing the similar conditions present. The author, who is associated with Ferris Institute, Big Rapids, Michigan, has presented a most challenging understanding of pharmacology in its minutest ramifications.

GOOD-BYE, DOCTOR ROCH. By Andre Soubiran. Translated by Helen Sebba. Garden City, New York: Doubleday & Company, Inc., 1961. Price, $4.50.

Written by a French physician, this novel concerns the struggles of a newly appointed medical director of a psychiatric hospital in his efforts to bring reforms to the institution. The methods of the administration and the attendants reminded the physician of the time he had spent in a concentration camp. The usual ingredients of a novel such as love and jealousy are woven in. This is interesting reading for leisure time.

H.E.A.

REHABILITATION OF A CHILD'S EYES. By Herbert M. Katzin, M.D., F.A.C.S., Director and Board Member, Eye Bank Laboratory, and Attending Surgeon, Manhattan Eye, Ear and Throat Hospital, New York, N. Y., and Geraldine

Wilson, R.N., Orthoptic Technician, New York, N. Y. Third edition of Scobee's "Rehabilitation of A Child's Eyes." Illustrated. St. Louis: C. V. Mosby Company, 1961. Price, $3.75.

Crossed eyes are the most important condition considered in this book, which gives a complete description and the mechanism and what to do. Emphasis is placed on necessity to get these children at two or three years of age—or before four—in order to correct the refractive errors and save the sight in both eyes. The book is really written for the use of parents. This is an excellent presentation of the subject.

PRACTICAL PEDIATRIC DERMATOLOGY. By Morris Leider, M.D., Associate Professor of Dermatology and Syphilology, New York University Post-Graduate Medical School, New York, N. Y.; Visiting Physician in Charge, Service of Dermatology, Bellevue Hospital, New York, N. Y.; Associate Attending Physician, University Hospital and New York University-Bellevue Medical Center, New York, N. Y.; Diplomate of the American Board of Dermatology and Syphilology. With 280 photographs and 15 drawings. Second edition. St. Louis: C. V. Mosby Company, 1961. Price, $13.75.

This is an excellent book for pediatricians and general practitioners, and dermatologists will find it good for reference. The information is up to date, practical, and easy to read. The high quality of the paper, type and binding is a credit to the publishers. Many will find the formulary of 101 dermatologic preparations for topical application very useful.

H.E.A.

TRAITOR WITHIN. Our Suicide Problem. By Edward Robb Ellis and George N. Allen. Garden City, New York: Doubleday & Company, Inc., 1961. Price, $3.95.

This book is a fascinating study on the suicide problem. Recent statistics reveal that 300 people attempt it each day, and fifty are successful. It seems to hit particularly at the more intelligent and highly educated segment of the world's population. The study goes into such factors as sex, race, season, economics, occupations, geography, suicide epidemics, sanity and many other related items. Methods of suicide and suicide notes are dealt with. The book is highly interesting for leisure time reading.

H.E.A.

NURSING HOME ADMINISTRATION. Training materials for administrators of nursing, boarding, and mental hygiene homes for the aged. By John D. Gerletti, Ed.D., Educational Coordinator, Attending Staff Association, Professor of Public Administration, University of Southern California, with C. C. Crawford, Ph.D., Educational Consultant, Attending Staff Association, Emeritus Professor of Education, University of Southern California, and Donovan J. Perkins, M.S., Business Manager, Attending Staff Association. 472 pages. Downey, California: (7601 East Imperial Highway) Attending Staff Association, 1961. Price, $6.50.

The authors are not physicians, but they are dealing with a problem in which all doctors are extremely interested, the problem of a nursing home—when, and where, and how. How to get it, the site to be selected, the planning, admin-

istrating, and building. The book is not set in linotype, but typewritten with typewriting face. The presentation of the book is odd and intriguing, and the subject matter is extremely valuable. The book is published, not by a publishing house but by the attending staff association in Downey, California. All the authors are actively interested in education and administration.

The book will prove of value to those in any area where there is a problem of nursing homes, homes for the aged, boarding homes, and mental hygiene problems.

WILLIAMS OBSTETRICS. Revised by Nicholas J. Eastman, Professor Emeritus of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief Emeritus to the Johns Hopkins Hospital, and Louis M. Hellman, Professor and Chairman, Department of Obstetrics and Gynecology, State University of New York, Downstate Medical Center; Director of Obstetrics and Gynecology, Kings County Hospital, Brooklyn. New York: Appleton-Century-Crofts, Inc., 1961. Price, $16.00.

This twelveth edition of Williams standard text of obstetrics has brought the subject matter up to date and deleted outmoded and useless material. Much of the subject matter has been derived from the author's work at Johns Hopkins Hospital and includes a new chapter on fetal malformations and fetal physiology. The subjects of hyperbilirubinemia, placental transfer and fetal hemostasis are excellently treated. The chapters on abortion are complete, from the standpoint of both prevention and treatment.

The material on endocrines and the toxemias is very thorough. For more detailed information, there is a complete bibliography. The last chapter, which deals with operative obstetrics, includes excellent diagrams and pictures.

This is a very comprehensive text for the student and serves as a reference for the busy practitioner.

J.R.P.

RELIEF OF SYMPTOMS. By Walter Modell, M.D., F.A.C.P., Director of Clinical Pharmacology and Associate Professor of Pharmacology, Cornell University Medical College, New York, N. Y.; Attending Physician, New York Veterans Administration Hospital, New York, N. Y.; Associate Visiting Physician, Bellevue Hospital, New York, N. Y.; Member, General Committee on Revision, United States Pharmacopeia XVII; Editor, *Clinical Pharmacology and Therapeutics*. 352 pages. Second edition. St. Louis: C. V. Mosby Company, 1961. Price, $11.50.

This is the second edition of a well-written textbook, devoted to a discussion of measures commonly employed in the relief of symptoms. The author, who has been a member of the Editorial Board of Cornell Conferences on Therapy, has written this book from a series of formal lectures and informal seminars, with students, interns, and house officers, in his association with Cornell University Medical College in New York.

The book is divided into three principal parts, (1) Theory (2) Practice and (3) Counsel. It is interesting and very easy reading, and does offer a different approach than that of the standard textbook of medicine. A wide variety of subjects is included, from various types of pain, anorexia, constipation, diarrhea, gas, to convulsions, muscle spasms and dysmenorrhea. The third part on Counsel consists of a dis-

cussion of Cortisone and its relation to the masking of symptoms. A series of twenty-four helpful tables of listings of the various categories of drugs are interspersed throughout the text, under both generic and proprietary names. The initial theoretical section has been condensed, and most of the text is devoted to Part II, Practice.

The book succeeds in presenting a readable case for symptomatic medicine which is its avowed intention. For this purpose alone, it can be recommended, but it does not in any sense take the place of a standard, well-written textbook of medicine.

R.W.B.

HYPNOSIS IN OBSTETRICS. Obstetric Hypnoanesthesia. By Ralph V. August, B.S., M.D., F.A.C.O.G., F.I.C.S., Consultant to Departments of Obstetrics and Gynecology, Mercy Hospital, Muskegon, Michigan; Chief of Department of Obstetrics, Hackley Hospital, Muskegon, Michigan. Technique of hypnosis recorded by Dr. August. New York-Toronto-London: Blackiston Division, McGraw-Hill Book Company, Inc., 1961. Price, $10.00.

This volume is unique in that the author derives his material from his own practice. This book contains numerous case histories and follows them through the entire pregnancy. Doctor August not only induces his own hypnoanesthesia, but delivers the baby or does his surgical procedure as well.

The chapter on pain as well as the one on contraindications is very well treated. To illustrate the material further, the publishers have enclosed a 33⅓ r.p.m. long-playing record of Doctor August's actual recordings of his patients being delivered under hypnoanesthesia.

This text is interesting reading and brings the physician up to date on one of the newer aspects of obstetrics.

J.R.P.

CLINICAL DIAGNOSIS BY LABORATORY EXAMINATIONS. John A. Kolmer, M.S.; M.D.; Dr. P.H.; Sc.D.; LL.D.; F.A.C.P.; F.A.C.D., (Hon.). Professor Emeritus of Medicine and Director of the Institute of Preventive Medicine and Public Health, Temple University School of Medicine; Professor of Medicine, Temple University School of Dentistry. Third edition. New York: Appleton-Century-Crofts, Inc., 1961. Price, $10.00.

This is the third edition of a textbook of slightly more than 500 pages devoted to the clinical significance of changes in laboratory examinations in relation to diagnosis and differential diagnosis of disease. It is said to be completely rewritten. The references at the end of each of the twenty-two chapters indicates that most of the literature on which the text is based comes from the period 1950 through 1957. Only occasional later references are noted.

Careful review left the reviewer with the impression that the book is particularly strong on serology, immunology, mycology, and bacteriology. It seemed particularly weak in chemistry, discussions related to metabolic disease, and endocrinology. For example, the discussion of the Vanden-Bergh test fails to point out that the direct reacting bilirubin is the conjugated form, and that the indirect reacting bilirubin represents that which has not yet been conjugated by the liver. Similarly, discussion of protein-bound iodine and radio-active iodine, not to mention some others, seems rather sketchy and inadequate.

The book is well bound and well illustrated. It contains 142 helpful tables inserted in appropriate areas of the text, which are an aid in formulating differential diagnosis.

A book which survives three editions certainly has a good deal to recommend it, which this one does. It is a classic reference in clinical pathology by a distinguished author.

R.W.B.

ESSENTIAL HYPERTENSION. An International Symposium. Chairman: F. C. Reubi, Berne. Edited by K. D. Bock, Basle, and P. T. Cottier, Berne. 81 figures. Berline-Goettingen-Heidelberg: Springer-Verlag, 1961.

This is an International Symposium on Hypertension sponsored by the Ciba Foundation, which was held in Berne, in June, 1960. It represents a varied collection of papers on the subject by international authorities. It begins with a paper by Page on "The Mosaic Theory" of hypertension, stressing the fact that arterial blood pressure is compounded of a large variety of facets. Recent advances in some of these facets are discussed. The question of inheritance of high blood pressure is thoroughly gone over. The rôle of salt intake in the development of essential hypertension is discussed. Renal hemodynamics, renal pressor mechanisms and adrenocortical function is presented in relation to their role in essential hypertension. Transcripts of the general discussions are included throughout the text.

Pharmacology of the new hypotensive drugs is presented, and combined drug therapy is discussed by able workers. A

section on results of surgical therapy is included. It will be noted that the papers in this symposium show considerable variation in their scope.

Some of these essays will be of considerable interest to the thoughtful practitioner, and particularly to the physician who desires to review some of the basic physiology, pharmacology, and therapeutics of essential hypertension.

The book is small, well illustrated with tables and graphs, and carefully referenced. A summary of each paper is included at the end. Certainly, most of the current thinking on the subject is included here.

R.W.B.

THE CARDIAC ARRHYTHMIAS. A Guide for the General Practitioner. By Brendan Phibbs, M.D., Casper Clinic, Casper, Wyoming. St. Louis: C. V. Mosby Company, 1961. Price, $7.50.

This is a very worth-while book, of slightly more than 100 pages, well printed and illustrated, and written from a practical point of view. As noted in the preface, the book is written to teach physicians who are not cardiologists to diagnose and treat cardiac arrhythmia. The basic tool employed is the electrocardiogram and the text attempts to outline, as simply as possible, both recognition and rationale of development of each of the principal arrhythmias.

Initially, a review of the basic anatomy and physiology is presented with discussion and illustrations of both normal and abnormal cardiac mechanism. Each arrhythmia is separately discussed and illustrated by numerous electrocardiograms and practice exercises are included for EKG identification at the end of the book.

A plan of treatment for each arrhythmia which is concise and specific as to dosages and exact procedures, is carefully outlined.

The book is very useful as a guide to the general practitioner in the handling of these problems. It fulfills its avowed purpose admirably without oversimplification.

R.W.B.

W. B. Saunders Company features the following recent books in their full-page advertisement appearing elsewhere in this issue:

CANCER OF THE CERVIX. By Graham, Sotto and Paloucek. Full and authoritative coverage of the diagnosis and management of cervical cancer—from Roswell Park Memorial Institute.

OPHTHALMIC PATHOLOGY. By Hogan and Zimmerman. An atlas and textbook on diagnosis of diseases of the eye and on the pathology of involved tissue.

HOSPITAL ADMINISTRATION. By Owen. Covers every aspect in the construction, organization and administration of today's hospitals.

## BOOKS RECEIVED

IMPORTANCE OF THE VITREOUS BODY IN RETINA SURGERY. With Special Emphasis on Reoperations. Second Conference of the Retina Foundation, May 30 and 31, 1958. Edited by Charles L. Schepens, M.D., Boston, Mass. 130 figures, including 4 in color; 3 plates in full color. St. Louis: C. V. Mosby Company, 1960. Price, $15.00.

CULTURE METHODS FOR INVERTEBRATE ANIMALS. A compendium prepared cooperatively by American zoologists under the direction of a committee from Section F of the American Association for the Advancement of Science: Paul S. Galtsoff, Frank E. Lutz, Paul S. Welch, and James G. Needham, Chairman; assisted by many specialists whose names appear in connection with their respective contributions to this volume. New York, N. Y.: Dover Publications, Inc., 1959. Price, $2.75.

BLOOD DISEASES OF INFANCY AND CHILDHOOD. By Carl H. Smith, M.A., M.D., Professor of Clinical Pediatrics, Cornell University Medical College, New York, N. Y.; Attending Pediatrician, The New York Hospital, New York, N. Y.; Consulting Pediatrician, Beekman-Downtown Hospital, New York, N. Y.; Fitkin Memorial Hospital, Neptune, N. J.; Misericordia Hospital, New York, N. Y.; New York Infirmary, New York, N. Y.; St. Joseph's Hospital, Far Rockaway, N. Y.; Sea View Hospital, Staten Island, N. Y.; Consulting Hematologist in Pediatrics, Lenox Hill Hospital, New York, N. Y. Illustrated. St. Louis: C. V. Mosby Company, 1960. Price, $15.00.

HAEMOPOIESIS. Cell Production and Its Regulation. Ciba Foundation Symposium. Editors for Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. 107 illustrations. Boston: Little, Brown and Company, 1961. Price, $11.00.

MATHEMATICAL BIOPHYSICS. Physico-Mathematical Foundations of Biology. By N. Rashevsky, Professor and Chairman, Committee on Mathematical Biology, The University of Chicago. Third revised edition. Volume 2. New York: Dover Publications, Inc., 1961. Price, $2.50.

MEDICAL CARE OF THE ADOLESCENT. By J. Roswell Gallagher, M.D., Chief of the Adolescent Unit, The Children's Hospital Medical Center, Boston, and Lecturer on Pediatrics, Harvard Medical School, and Staff Physician of the Adolescent Unit, New York: Appleton-Century-Crofts, Inc., 1960. Price, $10.00.

MEDICINE FOR NURSES. By M. Toohey, M.D., M.R.C.P., D.C.H., Physician, New End Hospital, London. With a Chapter on Psychological Medicine by Henry R. Rollin, M.D., D.P.M., Psychiatrist, Horton Hospital, Epsom, and New End Hospital, London. Fourth Edition. Edinburgh and London: E. and S. Livingstone Ltd., 1959. Price, $5.00.

## COMMUNICATIONS

*(Continued from Page 1576)*

Otto K. Engelke, M.D., President
Michigan State Medical Society

Dear Doctor Engelke:

It has come to our attention that a number of physicians may be administering Type I and Type II oral polio vaccines both on an individual and a group basis.

It is the recommendation of the Michigan Department of Health that these two presently licensed oral vaccines NOT be used routinely, but only in the event of an outbreak of a specific type.

The fact is that Salk vaccine is the only vaccine which offers full protection against all three types of paralytic poliomyelitis. It is therefore the only one which should be considered for routine use on an individual or mass immunization basis. If physicians throughout the state are beginning to administer the licensed oral vaccines to individuals and groups in their communities, it is our considered opinion that they are not acting in the best interests of the public health.

While the licensed oral vaccines are judged safe and effective within the limits of present knowledge, final proof can come only after the extensive field tests. The safety and efficacy of Salk vaccine is, of course, backed by tremendous protocol. We strongly urge that all physicians continue to use and promote the use of Salk vaccine in the four-dose schedule with a fifth dose five years after the fourth as the poliomyelitis vaccine of choice.

ALBERT E. HEUSTIS, M.D.
*Commissioner, Michigan Department of Health*

The Officers and Publication Committee of the
Michigan State Medical Society extend their

*Sincere Best Wishes*

for a

*Merry Christmas*

and a

*Happy New Year*

to

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FOR SALE: New eleven-room brick ranch type office building built for doctor's use, located in Kalamazoo, Michigan. More than ample paved parking area plus x-ray room, filing room, storage closets, dressing rooms, wash rooms, large dark room and adequate wiring and plumbing for doctor's use. All rooms are air-conditioned and mahogany paneled. Located on main arterial thoroughfare at very busy Y-intersection in exclusive residential area with stop lights, ninety-foot wide street in front of building. Has double garage and professional landscaping. Write Dr. Lloyd C. Miller, 1009 Sheridan Dr., Kalamazoo, Michigan, or phone FI 4-5551.

MEDICAL DOCTOR wanted in Holly, Michigan—now only two M.D.'s to serve community area of 10,000 population. Office space on ground floor (built for doctor now retired), excellent location, reasonable rent. Equipment available. For further information, write to Helen Shoppe, 111 S. Saginaw, Holly, or phone Mrs. Packer, MElrose 4-6841.

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YOUNG GP DESIRED IN WELL-ESTABLISHED GENERAL PRACTICE: Small town in northern Michigan, excellent residential district and schools; good hospital facilities. Guaranteed salary first year, leading to partnership for right person. Reply: Box 1, Michigan State Medical Society, 120 W. Saginaw Street, East Lansing, Michigan.

FOR SALE: Established general practice. Home and office combination in small town, rural area, in Southwestern Michigan. Excellent hospital facilities within 6 miles. Inquire of N. J. Walton, M.D., 61 E. Chicago St., Quincy, Michigan.

PHYSICIANS WANTED: Internist and pediatrician for association with established multi-specialty group in Detroit. $16,000-$18,000 first year with annual increases. Reply: Box 12, 120 W. Saginaw Street, East Lansing, Michigan.

**PHYSICIAN WANTED: Permanent appointment. 200-bed intermediate chronic disease and rehabilitation hospital. Generous salary plus attractive family residence and other fringe benefits. Also locum tenens position available January 1 to July, 1962. Reply: Box 2, 120 W. Saginaw Street, East Lansing, Michigan.**

## TELLS BATTLE CREEK STORY

The W. K. Kellogg Foundation of Battle Creek is circulating a new brochure to 15,000 medical and hospital personnel throughout the world regarding the new "special care unit" now operating in Community Hospital of Battle Creek.

This publication, titled "The Planning and Operation of an Intensive Care Unit," is intended to assist hospitals generally in considering whether such a concept of patient care could be advantageously applied to their particular situations.

Foundation grants in behalf of the hospital's special care unit, including construction costs to finish the fifth floor shell, the expenses of furnishing and equipping the unit and for the university's "before" and "after" study, have amounted to $117,825.

# Index to Advertisers

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Bibliography: (1) Jacobs, I.: GP *21*:93 (Jan.) 1960. (2) Shulman, I.: J.A.M.A. *175*:118-123 (Jan 14) 1961. (3) Moore, C. V., in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, ed. 2, Philadelphia, Lea & Febiger, 1960, p. 243.

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